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LISTA DE LUCRĂRI

A. PUBLICATII

A.1. Cărţi de autor sau capitole de specialitate

A.1.1. Cărţi / monografii / capitole în cărţi publicate în edituri internaţionale (Ci1 - Ci18)

Ci.1. Voicu, M., Pastravanu, O. 2023, *Non-recursive Behavioural Models in Control Analysis and Design* (pages 184), Cambridge Scholars Publishing, ISBN:978-1-5275-4296-9

Ci.2. Matcovschi, M.H., Pastravanu, O., 2009, Invariance properties of recurrent neural networks, In: H.N. Teodorescu, Junzo Watada, and L. Jain (Eds.), *Intelligent Systems and Technologies - Methods and Applications*, Studies in Computational Intelligence Series nr. 217, Springer Verlag, pp. 105–119, ISBN: 978-3-642-01884-8.

Ci.3. Lazar, M., Heemels, W.P.M.H., Weiland, S., Bemporad, A., Pastravanu, O., 2005, Infinity norms as Lyapunov functions for model predictive control of constrained PWA systems, In: Morari, Manfred; Thiele, Lothar; Rossi, Francesca (Eds.), *Hybrid Systems*: *Computation and Control*, Lecture Notes in Computer Science, 3414, pp. 417-432, Springer, ISSN: 0302-9743, ISBN: 978-3-540-25108-8.

Ci.4. Pastravanu, O., Matcovschi, M., Mahulea, C., 2004, Petri Net Toolbox – teaching discrete event systems under Matlab, In: Voicu, M. (Ed.), *Advances in Automatic Control*, pp. 247-256, Kluwer International Series in Engineering & Computer Science, 754, (444 p), ISBN 1-4020-7607-X.

Ci.5. Pastravanu, O., Voicu, M., 2004, Componentwise asymptotic stability – from flow-invariance to Lyapunov functions, In: Voicu, M. (Ed.), *Advances in Automatic Control*, pp. 257-270, Kluwer International Series in Engineering & Computer Science, 754, (444 p), ISBN 1-4020-7607-X.

Ci.6. Voicu, M., Pastravanu, O., 2004, Setting up the reference input in sliding motion control and its closed-loop tracking performance, In: Voicu, M. (Ed.), *Advances in Automatic Control*, pp. 383-392, Kluwer International Series in Engineering & Computer Science, 754, (444 p), ISBN 1-4020-7607-X.

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Ci.8. Marinovici, L., Pastravanu, O., 2003, Flow invariance properties for a class of uncertain discrete-time systems, In: Barbu, V., Lasieka, I., Tiba, D, Varsan, C. (Eds.), *Analysis and Optimization of Differential Systems*, pp. 269-280, IFIP 121, Kluwer, ISBN 1-4020-7439-5.

Ci.9. Voicu, M., Pastravanu, O., 2003, Componentwise asymptotic stability induced by symetrical polyhedral time-dependent constraints, In: Barbu, V., Lasieka, I., Tiba, D, Varsan, C. (Eds.), *Analysis and Optimization of Differential Systems*, pp. 433-442, IFIP 121, Kluwer, ISBN 1-4020-7439-5.

Ci.10. Gurel, A., Pastravanu, O., Lewis, F.L., 1998, A system-theoretic approach for discrete-event control of manufacturing systems, In: Gunawardena, J. (Ed.) *Idempotency*, pp. 242-261, Cambridge University Press (455 p), ISBN 052155344X.

Ci.11. Lewis, F.L., Tacconi, D., Gurel, A., Huang, H.H., Pastravanu, O., 1997, Manufacturing controller design and deadlock avoidance using matrix model for discrete event systems, In: Tzafestas, S.G. (Ed), *Methods and Applications of Intelligent Control*, pp. 485-508, Kluwer Academic Publishers (563 p), ISBN 0-7923-4624-6.

Ci.12. Voicu, M., Lazar, C., Schonberger, Fr., Pastravanu, O., Ifrim, S., 1996, Predictive control vs. PID control of thermal treatment processes, In: Albertos, P., Strietzel, R., Mort, N. (Eds.), *Control Engineering Solutions - A Practical Approach*, pp. 163-174, IEE Press, (300 p), ISBN 0-85296-829-9.

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Ci.14. Lewis, F.L., Huang, H.H., Tacconi, D., Gurel, A., Pastravanu, O., 1995, Manufacturing dispatching controller design and deadlock avoidance using a matrix equation formula, In: Lumia, R. (Ed.) *Modeling, Simulation, and Control Technologies for Manufacturing*, Proceedings of SPIE vol. 2596, pp. 63-77, 1995, ISBN: 9780819419606.

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Ci.16. Pastravanu, O., Voicu, M., Isopescu, L., Calinescu, R., 1993, Symbolic manipulation CAD for parameterized families of systems, In: Stowell, F.A., West, D., Howell, J.G. (Eds,) *Systems Science: Addressing Global Issues*, pp. 507-512, Plenum, ISBN-10: 0-306-44522-0, ISBN-13: 978-0306445224.

Ci.17. Pastravanu, O., Lazar, C., 1992, A professionally-disillusioned generation. Can there be found any remedies? In: Forslin, J., Kopacek, P. (Eds.) *Cultural Aspects of Automation*, pp 77-80, Springer, ISBN 3-211-82362-X.

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A.1.2. Cărţi / monografii / capitole în cărţi publicate în edituri naţionale recunoscute CNCS (Cn1 – Cn13)

Cn.1. Kloetzer, M., Mirea, L., Pastravanu, O., 2014, *Sisteme liniare continue*, Iasi, 340 p, Editura Politehnium, ISBN 978-973-621-422-6.

Cn.2. Stănescu, A.M., Mânzu, V., Caramihai, S., Păstravanu, O., 2013, Sisteme cu evenimente discrete (Cap. 28), în: Dumitrache I. Dragomir T. (coord.), *Automatica, vol. II,* pp. 658-747, Editura Academiei Române, ISBN 978-973-27-2298-5.

Cn.3. Ceangă, E., Pastravanu, O., 2010, Modele matematice (Cap. 4), în: Dumitrache I. (coord.), *Automatica, vol. I*, pp. 143 – 229, Editura Academiei Române, ISBN: 978-973-27-1882-7.

Cn.4. Voicu, M., Păstrăvanu, O., Dima, A. (eds.), 2009, *Ingineria românească – factor al dezvoltării durabile*, vol. 1, Zilele Academice ale Academiei de Ştiinţe Tehnice din România, ediţia a IV-a, Editura AGIR Bucureşti, 324 p, ISSN: 2066-6586.

Cn.5. Matcovschi, M.H, Pastravanu, O., 2008, *Aplicaţii ale reţelelor neurale în automatică,* Editura Politehnium, Iaşi, 180p, ISBN: 978-973-621-221-5.

Cn.6. Matcovschi, M.H, Pastravanu, O., 2008, *Petri Net Toolbox for MATLAB – Petri-net-based approaches to discrete event and hybrid systems in MATLAB-Simulink*, Editura Politehnium, Iaşi, 160 p, ISBN: 978-973-621-149-2.

Cn.7. Matcovschi, M.H, Pastravanu, O., 2008, *Teme de analiză şi sinteză a sistemelor cu evenimente discrete şi hibride,* Editura Politehnium, Iaşi, 116 p, ISBN: 978-973-621-025-1.

Cn.8. Pastravanu, O., Lefter, C., 2003, *Principiile conducerii numerice a sistemelor*, Editura Gh. Asachi, Iasi, 293p, ISBN 973-8292-87-5.

Cn.9. Pastravanu, O., Matcovschi, M., Mahulea, C., 2002, *Aplicatii ale retelelor Petri in studiul sistemelor cu evenimente discrete / Applications of Petri nets in studying systems with discrete events*, Editura Gh. Asachi, Iasi, 250p, ISBN 973-8292-86-7.

Cn.10. Pastravanu, O., Ibanescu, R., 2001, *Limbajul bond-graph în modelareaşsi simularea sistemelor fizico-tehnice*, Editura Gh. Asachi, Iasi, 469p, ISBN 973-8292-12-3.

Cn.11. Pastravanu, O., 1997, *Sisteme cu evenimente discrete – Tehnici calitative bazate pe formalismul retelelor Petri*, Editura Matrix Rom, Bucuresti, 243p., ISBN 973-9254-61-6.

Cn.12. Voicu, M., Pastravanu, O., 1997, *Non-Recursive Models in Control System Analysis and Design*, Editura Dosoftei, Iasi, 1997, 145p., ISBN 973-9135-31-5.

Cn.13. Lazar, C., Pastravanu, O., Poli, E., Schonberger, Fr., 1996, *Conducerea asistată de calculator a proceselor tehnice – Proiectarea si implementarea algoritmilor de reglare numerica*, Editura Matrix Rom, Bucuresti, 226p., ISBN 973-97494-6-1.

A.1.3. Manuale didactice / Lucrări didactice (M1 – M7)

M.1. Pastravanu O., Ferariu L., Budaciu C., Lupascu C. *Teoria Sistemelor - Fundamente teoretice și studii de caz*, 260 p. Format digital, 2025. Moodle, https://edu.tuiasi.ro/.

M.2. Mahulea, C., Matcovschi, M.H., Pastravanu, O., *Manual de utilizare şi demos Petri Net Toolbox,* (web, limba engleză, pagini web + filme demonstrative Macromedia Flash şi Maya, echivalent 250 p), http://www.ac.tuiasi.ro/pntool/, actualizarea cea mai recenta 2016, vers 2.4.

M.3. Kloetzer, M., Pastravanu, O., *Instrumente Matlab in studierea dinamicilor modelabile liniar*, 158 p, Editura Politehnium, 2014, ISBN 978-973-621-425-7.

M.4. Kloetzer, M., Pastravanu, O., *Modelarea sistemelor fizice – Îndrumar de laborator*, 60 p, Format digital, 2012. Moodle, https://edu.tuiasi.ro/.

M.5. Pastravanu, O., Barabula, A., 2002, *Sisteme automate: Elemente de curs, Probleme rezolvate analitic si asistat de calculator*, Editura Gh. Asachi, Iasi, 198 p, ISBN 973-8292-13-1.

M.6. Voicu, M., Ferariu, L, Pastravanu, O., Schonberger, Fr., 1999, *Introducere in Automatica - Culegere de probleme*, Editura Matrix Rom, 217 p, ISBN 973-685-135-4.

M.7. Voicu, M., Silion, R., Păstrăvanu, O., Codreanu, C., Grigoraş, V., *Biblioteca de programe pentru rezolvarea problemelor de teoria sistemelor - Manual de utilizare,* Institutul Politehnic Iasi., 1983, 338 p.

A.2. Articole în reviste cotate ISI şi lucrări în volumele unor manifestări ştiinţifice indexate ISI

A.2.1. Articole în reviste cotate ISI (Risi1 – Risi32)

Risi.1. Matcovschi, M.H, Apetrii, M., Pastravanu, O., Voicu, M., 2021, Invariant sets with arbitrary convex shapes in linear system dynamics, *Romanian Journal of Information Science and Technology*, 24(4), pp.402-417, ISSN: 1453-8245. (Q1, 3.7)

Risi.2. Lupascu, C.A., Nechita, S.C., Pastravanu, O., 2019. Dual switched positive systems - a less conservative condition for diagonal quadratic stability, *International Journal of Systems Science*, vol. 50, issue 3, pp. 2529-2538. (Q1, 4.9)

Risi.3. Matcovschi, M.H., Pastravanu, O., 2018, Further results on diagonally invariant exponential stability of switching linear systems, *Mathematical Problems in Engineering*, vol. 2018, Article Number: 9419514. (Q3, 1.43)

Risi.4. Pastravanu, O., Matcovschi, M.H., Voicu, M., 2016. Interval matrix systems and invariance of non-symmetrical contractive sets. *Romanian Journal of Information Science and Technology*, 19(1-2), pp.137-147, ISSN: 1453-8245. (Q1, 3.7)

Risi.5. Pastravanu, O., Matcovschi, M.H., Voicu, M., 2016. Row and column representatives in qualitative analysis of arbitrary switching positive systems. *Romanian Journal of Information Science and Technology*, 19(1-2), pp.127-136, ISSN: 1453-8245. (Q1, 3.7)

Risi.6. Pastravanu O., Matcovschi M., 2016, (M, Beta)-stability of positive linear systems, *Mathematical Problems in Engineering*, vol. 2016, article ID 9605464, ISSN: 1024-123X. Q3, 1.43

Risi.7. Pastravanu O., Matcovschi M.H., 2015, Sufficient conditions for Schur and Hurwitz diagonal stability of complex interval matrices, *Linear Algebra and its Applications*, vol. 467, pp. 149-173, ISSN: 0024-3795. (Q1, 1)

Risi.8. Apetrii M., Matcovschi M.H., Pastravanu O., Rotenstein E., 2015, Invariance for stochastic differential systems with time-dependent constraining sets. *Acta Mathematica Sinica-English Series*, vol. 31, nr. 7, pp. 1171-1188, ISSN: 1439-8516, (Q2, 0.8)

Risi.9. Pastravanu, O., Matcovschi, M.H., 2014, Max-type copositive Lyapunov functions for switching positive linear systems, *Automatica*, 50 (2014) 3323–3327, ISSN: 0005-1098. (Q1, 4.8)

Risi.10. Matcovschi M.3.5, H., Pastravanu O., 2014, Novel estimations for the eigenvalue bounds of complex interval matrices, *Applied Mathematics and Computation*, vol. 234, pp. 645-666, ISSN: 0096-3003. (Q1, 3.5)

Risi.11. Pastravanu, O., Matcovschi, M.H., 2013, Stability of matrix polytopes with a dominant vertex and implications for system dynamics, *Abstract and Applied Analysis*, Special Issue on "Uncertain Dynamical Systems: Analysis and Applications", article ID 396759, ISSN: 1085-3375, e-ISSN: 1687-0409., (Q1, 1.274)

Risi.12. Matcovschi M.H., Pastravanu O., 2012, Diagonally invariant exponential stability and stabilizability of switching linear systems, *Mathematics and Computers in Simulation*, vol. 82, issue 8, pp. 1407-1418, ISSN: 0378-4754. (Q1, 4.4)

Risi.13. Matcovschi M.H., Pastravanu O., Voicu M., 2012, Right bounds for eigenvalue ranges of interval matrices - Estimation principles vs global optimization, *Journal of Control Engineering and Applied Informatics*, vol. 14, nr. 1, pp. 3-13, ISSN: 1454-8658. (Q4, 0.4)

Risi.14. Pastravanu, O., Matcovschi, M.H., 2011, Invariance properties of interval dynamical systems, *International Journal of Systems Science*, vol. 42, issue 12, pp. 1993-2007, ISSN: 0020-7721. (Q1, 4.9)

Risi.15. Pastravanu, O., Matcovschi, M.H., 2011, Comments on "Assessing the Stability of Linear Time-Invariant Continuous Interval Dynamic Systems", *IEEE Trans. Automatic Control*, vol. 56, no. 6, pp. 1442-1445, ISSN: 0018-9286. (Q1, 6.2)

Risi.16. Pastravanu, O., Matcovschi, M.H., 2010, Diagonal stability of interval matrices and applications, *Linear Algebra and its Applications*, vol. 433, issues 8-10, pp. 1646-1658, ISSN 0024-3795. Q1, 1

Risi.17. Pastravanu, O., Matcovschi, M.H., 2010, Linear time-variant systems: Lyapunov functions and invariant sets defined by Holder norms, *Journal of the Franklin Institute*, vol. 347, issue 3, pp.627-640, ISSN 0016-0032. (Q1, 3.7)

Risi.18. Vrabie, D., Pastravanu, O., Abu-Khalaf, M., Lewis, F.L., 2009, Adaptive optimal control for continuous-time linear systems based on policy iteration, *Automatica* 45 (2), pp. 477-484, ISSN: 0005-1098. (Q1, 4.8)

Risi.19. Pastravanu, O., Matcovschi, M.H., Voicu M., 2009, Invariant-set-based analysis and design. a survey of some noticeable contributions, *Romanian Journal of Information Science and Technology*, vol. 12, no. 4, pp. 425-439, ISSN: 1453-8245. (Q1, 3.7)

Risi.20. Pastravanu, O., Matcovschi, M.H., 2009, Matrix measures in the qualitative analysis of parametric uncertain systems, *Mathematical Problems in Engineering*, vol. Article ID 841303, ISSN: 1024-123X, e-ISSN: 1563-5147. (Q3, 1.43)

Risi.21. Pastravanu O., Voicu M., 2006, Generalized matrix diagonal stability and linear dynamical systems, *Linear Algebra and its Applications*, 419, issues 2-3, 299-310, ISSN: 0024-3795. (Q1, 1)

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Risi.23. Pastravanu, O., Voicu, M., 2005, On the componentwise stability of linear systems, *International Journal of Robust and Nonlinear Control*, 15, 1, 15-23, ISSN: 1049-8923. (Q1, 3.2)

Risi.24. Pastravanu, O., Voicu, M., 2004, Necessary and sufficient conditions for componentwise stability of interval matrix systems, *IEEE Trans. Automatic Control*, 49, 6, 1016-21, ISSN: 0018-9286. Q1, 6.2

Risi.25. Matcovschi, M., Pastravanu, O., 2004, Flow-invariance and stability analysis for a class of nonlinear systems with slope conditions, *European Journal of Control*, 10, 4, 352-64, ISSN: 0947-3580. (Q2, 2.5)

Risi.26. Lazar, M., Pastravanu, O., 2002, A neural predictive controller for non-linear systems, *Mathematics and Computers in Simulation*, 60, 3-5, 315-24, ISSN: 0378-4754. (Q1, 4.4)

Risi.27. Voicu, M., Pastravanu, O., 2002, Time-domain and parametric L2-properties corresponding to Popov inequality, *Kybernetika*, 38, 5, 617-29, ISSN: 0023-5954. (Q4, 0.9)

Risi.28. Teodosiu, C., Pastravanu, O., Macoveanu, M., 2000, Neural network models for ultrafiltration and backwashing, *Water Research*, 34, 18, 4371-80, ISSN: 0043-1354. (Q1, 11.5)

Risi.29. Lewis, F.L., Gurel, A., Bogdan, S., Doganalp, A., Pastravanu, O., 1998, Analysis of deadlock and circular waits using a matrix model for fle,q1, 4.8xible manufacturing systems, *Automatica*, Vol. 34, No. 9, 1083-1100, ISSN: 0005-1098. (Q1, 4.8)

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Risi.31. Huang, H.H., Lewis, F.L., Pastravanu, O., Gurel, A., 1995, Flow-shop scheduling design in an FMS matrix framework, *Control Engineering Practice*, Vol.3, No.4, 561-568, ISSN: 0967-0661. (Q1, 5.4)

Risi.32. Pastravanu, O., Voicu, M., 1989, A microcomputer-based teaching environment for control engineering, *Systems Analysis - Modelling - Simulation*, vol 6, nr. 11-12, 933-937, ISSN: 0232-9298 Gordon Breach Sci Publ Ltd (incorporated into *International Journal of Systems Science*, archive 1984-2003: http://dl.acm.org/citation.cfm?id=J667). (Q1, 3.7)

A.2.2 Articole în volumele unor manifestări ştiinţifice indexate ISI Proceedings (Visi1 – Visi63)

Visi.1. Matcovschi; M.H., Apetrii; M., Pastravanu, O., 2024, Comprehensive framework for polyhedral set invariance in continuous-time system dynamics, *IEEE 28th International Conference on System Theory, Control and Computing* (ICSTCC 2024), pp. 349-354, ISSN: 2372-1618

Visi.2. Lupascu; C.A., Coca, D., Pastravanu, O., 2024, A novel architecture - Switching Echo State Networks *IEEE International Conference on Automation, Quality and Testing, Robotics* (AQTR), pp. 181-186, .ISSN: 1844-7872

Visi.3. Pastravanu, O, Matcovschi, M.H., 2023, Lyapunov functions for discrete-time arbitrary switching linear systems - Joint setting for mode dependent and independent

constructions, *IEEE 27th International Conference on System Theory, Control and Computing* (ICSTCC 2023), pp. 1-6, ISSN: 2372-1618

Visi.4. Pastravanu, O, Matcovschi, M.H., Voicu, M., 2022, Test Matrices for Componentwise Asymptotic Stability of Polytopic Systems, *IEEE 26th International Conference on System Theory, Control and Computing* (ICSTCC2022), pp. 25-30, ISSN: 2372-1618

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Visi.8. Pastravanu, O., Matcovschi, M.H., Voicu, M., 2020, Non-symmetrical setup of componentwise stabilization for continuous-time interval systems, *24th International Conference on System Theory, Control and Computing* (ICSTCC 2020), pp. 1-6, ISBN: 978-1-7281-9809-5.

Visi.9. Pastravanu, O., Matcovschi, MH, 2020, Algebraic criteria for a class of contractive symmetrical sets invariant with respect to arbitrary switching linear dynamics, *22nd IEEE International Conference on Automation, Quality and Testing, Robotics* (AQTR 2020), pp. 319-324, ISBN: 978-1-7281-7167-8.

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Visi.14. Matcovschi, M.H., Pastravanu, O., Voicu, M., 2018, Enhancing the role of column representatives in testing the invariance properties of switching systems, *22nd International Conference on System Theory, Control and Computing* (ICSTCC 2018), pp. 129-134. ISBN: 1538644444, 978-1-5386-4444-7.

Visi.15. Pastravanu, O., Matcovschi M.H., Pauca, O., 2018, Positive interval system dynamics explored via vertex representatives vs. vertex majorizations, *22nd International Conference on System Theory, Control and Computing* (ICSTCC 2018), pp. 141-146. ISBN: 1538644444, 978-1-5386-4444-7.

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A3. Articole în reviste şi în volumele unor manifestări ştiinţifice indexate în alte baze de date internaţionale recunoscute - BDI

A.3.1 Articole în reviste indexate în alte baze de date internaţionale – BDI (Rbdi1 – Rbdi60)

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B. PROPRIETATE INTELECTUALĂ

Bi.1. Lewis, F.L., Tacconi, A., Pastravanu, O., Gurel, A., 2001, Method and apparatus for testing and controlling a flexible manufacturing system, *Pattent No. US 6,185,469 B1*, Date of Patent: Feb. 6, 2001, http://www.freepatentsonline.com/6185469.html .

Bi.2. Mahulea, C., Matcovschi, M., Pastravanu, O., 2004, Petri Net Toolbox for MATLAB, *The MathWorks Connections Program*, The MathWorks Inc. https://www.mathworks.com/products/connections/product_detail/petri-net-toolbox.html, Certificat de înregistrare ORDA 1451/20.07.2004, Learning about Petri Net Toolbox for use with MATLAB (Cn.6) http://www.pntool.ac.tuiasi.ro/

C. GRANTURI/ PROIECTE

C.1. Granturi/ proiecte câștigate prin competiție ca director/responsabil

C.1.1. Granturi/ proiecte câștigate prin competiție ca director/responsabil la nivel internațional (Pdi1 - Pdi2)

Pdi.1. Pastravanu, O., *Research in Automated Control Theory and Manufacturing,* Proiect de cercetare în cadrul Institutului de Cercetări în Automatică şi Robotică, Fort Worth, US (1993-1994). UTA, TX 76019, US Information Agency, Exchange Visitor Facilitative Staff GC/V: D308377 / April 18, 1993. Finanţare: Universitatea Texas Arlington (1 an)

Pdi.2. Pastravanu, O., *Research in Nonlinear System Identification and Control,* Proiect de cercetare în cadrul Laboratorului de Automatică al Universităţii Ghent, Belgia (1992-1993), Ambassade de Belgique, P.07-91.20.10, No 1277 / August 11th, 1992. Finanţare: Guvernul Belgiei (1 an).

C.1.2. Granturi/ proiecte câștigate prin competiție ca director/responsabil la nivel național (Pdn1 – Pdn5)

Pdn.1. Pastravanu, O., *Diagonal stability and flow invariance in system engineering. Techniques specialized for classes of dynamics, encompassed by a unified framework*, PN-II-ID-PCE-2011-3-1038, CNCS–IDEI, contract nr. 208/05.10.2011. Finanţare: UEFISCDI (5 ani).

Pdn.2. Pastravanu, O., *Integrarea Petri Net Toolbox cu mediul Simulink și crearea de noi instrumente software, cu largă aplicabilitate în studierea dinamicilor hibride,* Universitatea Tehnică Iaşi - Grant CNCSIS tip A, contract nr. 33371/2004, Tema nr. 33, cod CNCSIS A541, (2004-2007). Finanţare: CNCSIS (3 ani).

Pdn.3. Pastravanu, O., *Laborator de instruire în domeniul conducerii asistate de calculator a proceselor – LICAP,* Universitatea Tehnică Iaşi - grant 2MU-103, contract 12819/28.09.1998 (1998 - 2002). Finanţare: Banca Mondială şi Guvernul României (4 ani).

Pdn.4. Pastravanu, O. (responsabil temă - angajat al I.C.S.I.T. Automatizări - Filiala Iași), *Metoda de prelucrare a caracteristicilor de transfer statice și dinamice pentru identificarea parametrică a modelului diodei semiconductoare și a modelului tip Gummel-Poon pentru tranzistorul bipolar,* I.C.S.I.T. Automatizări - Filiala Iași; nr. 1418/1985. Finanțare: Institutul Politehnic Iași (1 an).

Pdn.5. Pastravanu, O. (responsabil temă - angajat al C.F.S. Iași), *Realizarea unei versiuni FELIX C-256 pentru rutinele din biblioteca ELIPTIC privind rezolvarea ecuațiilor Poisson și Helmotz tridimensionale în coordonate carteziene,* C.F.S. Iași - Oficiul de calcul; nr. 1398/1983. Finanțare: Universitatea "Al. I. Cuza" Iași - Facultatea de Fizică (1 an).

C.2. Granturi/ proiecte câștigate prin competiție ca membru în echipă

C.2.1. Granturi/ proiecte câștigate prin competiție ca membru în echipă la nivel internațional (Pmi1 – Pmi3)

Pmi.1. Voicu, M. (coordonator consorţiu), Pastravanu, O. (elaborarea draftului pentru proiect, coordonare executivă consorţiu), *EU Compatible Training in Industrial Automation – COMPANION,* TEMPUS MJEP 11467/1996 (1996-1999). Finanţare: TEMPUS-PHARE, UE (4 ani).

Pmi.2. Voicu, M. (coordonator Romania), Pastravanu, O. (coordonare executivă Romania), *Improvement in Automatic Control Technologies – IMPACT,* TEMPUS JEP 2011/1991 (1991-1994). Finanţare: TEMPUS-PHARE, UE (4 ani).

Pmi.3. Voicu, M. (coordonator Romania), Pastravanu, O. (coordonare executivă Romania) *Higher Education in Control Engineering – HECE,* TEMPUS JEP 0886/1990 (1990-1993). Finanţare: TEMPUS-PHARE, UE (4 ani).

C2.2. Granturi/ proiecte câștigate prin competiție ca membru în echipă la nivel național (Pmn1 – Pmn3)

Pmn.1. Lazar, C. (director), *Tehnologii informatice de timp real pentru sistemele incorporate care asigură controlul lanțului de transmisie a puterii la autovehicule,* Grant CNMP, PNII-Programul 4, Contract nr. 12100/01.10.2008 (2008-2011). Finanțare: UEFISCDI (3 ani).

Pmn.2. Matcovschi, M.H. (director), *Dinamica sistemelor şi mulţimi invariante la flux: Noi abordări conceptuale, instrumente teoretice şi software,* Grant CNCSIS tip A, cod CNCSIS A255 (2005-2008). Finanţare: CNCSIS (3 ani).

Pmn.3. Lazar, C. (director), *Tehnici avansate bazate pe vederea artificială pentru conducerea roboţilor,* Grant CNCSIS tip A, cod CNCSIS A232 (2006-2008). Finanţare: CNCSIS (2 ani).

Pmn.4. Lazar C. (director), *Acordarea neuro-predictivă a algoritmilor de conducere,* Universitatea Tehnică Iaşi - Grant CNCSIS tip A, contract nr. 40222/2003, tema nr. 10, cod CNCSIS A258 (2003-2004). Finanţare: CNCSIS (1 an).

Pmn.5. Voicu, M. (director), *Cercetări privind elaborarea unui sistem informatic pentru conducerea inteligentă a sistemelor de fabricaţie flexibilă*, tema nr. 57, cod CNCSIS 136/2002, tema nr. 40, cod CNCSIS 340/2003. Finanţare: MEC (2 ani).

Pmn.6. Voicu, M. (director), *Analiza şi implementarea unor metode avansate de conducere a fabricaţiei*, tema 33, cod CNCSIS 942/2000, tema nr. 17, cod CNCSIS 79/2001. Finanţare: MEC (2 ani).

Pmn.7. Lazăr, C. (director), *Acordarea parametrilor regulatoarelor cu predicţie şi testarea performanţelor pe instalaţii*, contract nr. 34280/99, tema 18, cod CNCSIS 259, 1999.

Finanţare: MEN (1 an).

Pmn.8. Lazăr, C. (director), *Regulatoare numerice în controlul automat al proceselor*, Grant CNFIS nr. 12837, cod 104, 1998. Finanţare: Banca Mondială şi Guvernul României (1 an).

Pmn.9. Lazăr, C. (director), *Implementarea algoritmilor de reglare cu predicţie pentru conducerea proceselor termice folosind procesoare specializate*, contract nr. 37/98, tema 13, cod CNCSU 504, 1998. Finanţare: MEN (1 an).

Pmn.10. Voicu, M. (director), *Sistem integrat de laboratoare pentru studiul domeniului fabricaţiei asistate de calculator*, Grant CNFIS, cod 6, poziţia 2, 1998-2002. Finanţare: Banca Mondială şi Guvernul Românie (4 ani).

Pmn.11. Voicu, M. (director), *Utilizarea sistemelor de vedere artificială în conducere roboţilor industriali*, Grant CNCSU 545/1998, tema 47. Finanţare: MEN (1 an).

Pmn.12. Voicu, M. (director), *Modele și metode de recunoastere a obiectelor 3D utilizând imagini bidimensionale cu nivele de gri*, Grant 143, contract nr. 7002/97 – tema 5. Finanţare: Ministerul Învatamântului (1 an).

Pmn.13. Voicu, M. (director), *Metode de autoacordare a algoritmilor tipizati de conducere a proceselor industriale*, Grant 145, contract nr. 7002/97, tema 4, Finanţare: Ministerul Învatamântului (1 an)

Pmn.14. Lazăr, C. (director), *Proiectarea asistată de calculator a algoritmilor de reglare cu predicţie utilizaţi în conducerea proceselor termice,* contract nr. 7002/97, tema 3, cod CNCSU 141, 1997, Finanţare: MEN (1 an).

Pmn.15. Voicu, M. (director), *Modele și metode de recunoastere a obiectelor 3D utilizând imagini bidimensionale cu nivele de gri*, Grant 553, contract nr. 5002/96 – tema 2. Finanţare : Ministerul Învăţământului (1 an).

Pmn.16. Voicu, M. (director), *Metode de estimare și analiză a complexității în recunoașterea formelor bidimensionale*, contract grant nr. 2074/28.10.96, tema B2. Finanţare: MCT (1 an).

Pmn.17. Voicu, M. (director), *Aplicaţii ale inteligenţei artificiale în conducerea sistemelor tehnice*, Grant 480, contract nr. 4002/95, poz. A14. Finanţare: Ministerul Învăţământului (1 an).

Pmn.18. Voicu, M. (director), *Modele și metode de recunoaștere a obiectelor 3D utilizând imagini bidimensionale cu nivele de gri*, Grant 553, contract nr. 4002/95, poziția B4. Finanţare: Ministerul Învăţământului (1 an).

Pmn.19. Voicu, M. (director), *Utilizarea limbajului inteligenţei artificiale (CLIPS) pentru implementarea aplicaţiilor de control în timp real*, contract nr. 10116/1994. Finanţare: Ministerul Învăţământului (1 an).

Pmn.20. Voicu, M. (director), *Utilizarea bazelor de date în sisteme expert destinate conducerii inteligente a proceselor industriale*, contract nr. 5026/1992. Finanţare: Ministerul Învăţământului (1 an).

Pmn.21. Voicu, M. (responsabil temă), Lazar, C., Pastravanu, O., Marcu, T., Poli, E., Ifrim, S., Onea, Al., Schonberger, Fr., *Utilizarea bazelor de date in sistemele expert destinate conducerii inteligente a proceselor industriale*, Institutul Politehnic Iași - nr. 10354/28.11.1991. Finanțare: M.I.S. (1 an).

Pmn.22. Bejan, I. (responsabil temă), Voicu, M., Lazar, C., Marcu, T., Pastravanu, O., *Pachet de programe pentru identificarea surselor de informatie necunoscute*, Institutul Politehnic Iasi – Facultatea de Electrotehnică, nr. 823/1989. Finanțare: I.C.S.I.T. - T.C.I. București - filiala Iași (1 an).

Pmn.23. Voicu, M. (responsabil temă), Lazar, C., Pastravanu, O., *Elaborarea și validarea prin simulare a unui estimator de stare pentru procese lente perturbate aleator*, Institutul Politehnic Iasi – Facultatea de Electrotehnică, nr. 4313/1988. Finanțare: C.T.C.E. Iași (1 an).

Pmn.24. Bejan, I. (responsabil temă), Voicu, M., Lazar, C., Pastravanu, O., Pal, Cr., Asandei,

D., Leca, M., *Studiu privind utilizarea tehnicii de calcul in optimizarea distributiei energiei electrice la I.R.E. Bacău*, Institutul Politehnic Iasi – Facultatea de Electrotehnică, nr. 4338/1988. Finanțare: I.R.E. Bacău (1 an).

Pmn.25. Bejan, I. (responsabil temă), Voicu, M., Lazar, C., Pastravanu, O., Pal, Cr., Asandei, D., Leca, M., *Cercetari privind prelucrarea imaginilor TV în scopul recunoașterii formelor în robotică*, Institutul Politehnic Iasi – Facultatea de Electrotehnică, nr. 2631/1985, Finanțare: C.T.C.E. Suceava.

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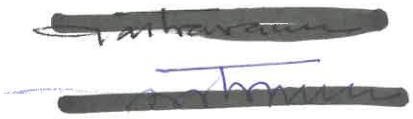

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență
Automatică și Informatică Aplicată

Numele şi prenumele: **Mihaela-Hanako MATCOVSCHI**

A. Teza de doctorat.

1. *Studiu de identificare şi diagnoză a anomaliilor sistemelor dinamice* (conducător prof. dr. doc. ing. Alfred Braier), iunie 2001

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. M.H. Matcovschi, O. Pastravanu, 2009, Invariance properties of recurrent neural networks, In: *Intelligent Systems and Technologies - Methods and Applications* (H.N. Teodorescu, Junzo Watada, and L. Jain, Eds.), Studies in Computational Intelligence Series nr. 217, Springer Verlag, pp. 105–119, ISBN: 978-3-642-01884-8. (indexata ISI)

2. O. Pastravanu, M.H. Matcovschi, and C. Mahulea, 2004, Petri Net Toolbox – Teaching Discrete Event Systems under MATLAB, In: *Advances in Automatic Control*, (M. Voicu, Ed.), Kluwer Academic Publishers, Boston/Dordrecht/London, (444p), pp. 247-258, ISBN: 0-4040-7607. (indexata ISI)

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. M.H. Matcovschi, O. Pastravanu, 2008, *Petri Net Toolbox for MATLAB – Petri-net-based approaches to discrete event and hybrid systems in MATLAB-Simulink*, Editura Politehnium Iaşi, ISBN: 978-973-621-149-2. (160 pg.)

2. M.H. Matcovschi, O. Pastravanu, 2008, *Teme de analiză şi sinteză a sistemelor cu evenimente discrete şi hibride*, Editura Politehnium Iaşi, ISBN: 978-973-621-025-1. (116 pg.)

3. M.H. Matcovschi, O. Pastravanu, 2008, *Aplicaţii ale reţelelor neurale în automatică*, Editura Politehnium Iaşi, ISBN: 978-973-621-221-5. (180 pg.)

4. M.H. Matcovschi, 2003, *Lanţuri şi sisteme de aşteptare markoviene*, Editura Gh. Asachi, Iaşi, ISBN: 973-621-025-1. (206 pg.)

5. O. Pastravanu, M.H. Matcovschi, C. Mahulea, 2002, *Aplicaţii ale reţelelor Petri în studiul sistemelor cu evenimente discrete*, Editura Gh. Asachi, Iaşi, ISBN: 973-8292-86-7. (250 pg.)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. C. Mahulea, M.H. Matcovschi, O. Pastravanu, *Manual de utilizare şi demos Petri Net Toolbox*, http://www.ac.tuiasi.ro/pntool/, actualizare 2025.

2. M.H. Matcovschi, O. Pastravanu, *Manual de utilizare şi demos Petri Net Simulink Block*, http://www.ac.tuiasi.ro/pnsb/, actualizare 2012.

3. M.H. Matcovschi, *Sisteme de aşteptare. Aplicaţii numerice utilizând MATLAB Web Server* 2012.

4. C. Lefter, M.H. Matcovschi, *Sisteme de operare*, 2006

5. M.H. Matcovschi, T. Ganciu, *Aplicaţii numerice în identificarea sistemelor*, 2003.

6. M.H. Matcovschi, *Introducere în informatica industrială*, 2003.

7. M.H. Matcovschi, D. Condurache, *Fundamentele matematice ale mecanicii roboţilor*, 2002.

8. M.H. Matcovschi, *MATLAB Web Server – Manual de utilizare în limba română*, 2001.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F1 – lucrări ISI

1. M.H. Matcovschi, Apetrii M., Pastravanu O., Voicu M., 2021, Invariant Sets With Arbitrary Convex Shapes In Linear System Dynamics, *Romanian Journal of Information Science and Technology*, ISSN 1453-8245, Vol. 24, Nr. 4 (2021), pp. 402–417. WOS:000731880700005

2. M.H. Matcovschi, O. Pastravanu, 2018, Further Results on Diagonally Invariant Exponential Stability of Switching Linear Systems, *Mathematical Problems In Engineering*, volume 2018, Article ID 9419514, DOI: 10.1155/2018/9419514. WOS: 000440905900001.

3. O. Pastravanu, M.H. Matcovschi, and M. Voicu, 2016. Interval matrix systems and invariance of non-symmetrical contractive sets. *Romanian Journal of Information Science and Technology*, vol. 19, nr. 1-2, pp.137-147, ISSN: 1453-8245, WOS: 000399549500011.

4. O. Pastravanu, M.H. Matcovschi, and M. Voicu, 2016. Row and column representatives in qualitative analysis of arbitrary switching positive systems. *Romanian Journal of Information Science and Technology*, vol. 19, nr. 1-2, pp. 127-136, ISSN: 1453-8245, WOS: 000399549500010,

5. O. Pastravanu, M.H. Matcovschi, 2016, (M, Beta)-stability of positive linear systems, *Mathematical Problems in Engineering*, vol. 2016, article ID 9605464, ISSN: 1024-123X. WOS: 000371657000001.

6. O. Pastravanu, M.H. Matcovschi, 2015, Sufficient conditions for Schur and Hurwitz diagonal stability of complex interval matrices, Linear Algebra and its Applications, vol. 467, pp. 149-173, ISSN 0024-3795, WOS: 000348260300011.

7. M. Apetrii, M.H. Matcovschi, O. Pastravanu, E. Rotenstein, 2015, Invariance for stochastic differential systems with time-dependent constraining sets. *Acta Mathematica Sinica-English Series*, vol. 31, nr. 7, pp. 1171-1188, WOS: 000356877100010, ISSN: 1439-8516.

8. O. Pastravanu, M.H. Matcovschi, 2014, Max-type copositive Lyapunov functions for switching positive linear systems, *Automatica*, vol. 50, pp. 3323–3327, ISSN: 0005-1098, WOS:000347760100043,

9. M.H. Matcovschi, O. Pastravanu, 2014, Novel estimations for the eigenvalue bounds of complex interval matrices, *Applied Mathematics and Computation*, vol. 234, pp. 645-666, DOI: 10.1016/j.amc.2014.02.054, ISSN 0096-3003 (ISI).

10. O. Pastravanu, and M.H. Matcovschi, 2013, Stability of matrix polytopes with a dominant vertex and implications for system dynamics, *Abstract and Applied Analysis*, Special Issue on "Uncertain Dynamical Systems: Analysis and Applications", article ID 396759, ISSN: 1085-3375, e-ISSN: 1687-0409.

11. T. Asaftei, M.-H. Matcovschi, 2013, Timed Continuous Petri Nets: Set invariance in feedback design for componentwise boundedness and weak conservativity, *Journal of Control Engineering and Applied Informatics* (CEAI), vol. 15, no. 2, pp. 46-53, ISSN 1454-8658

12. M.H. Matcovschi, O. Pastravanu, 2012, Diagonally invariant exponential stability and stabilizability of switching linear systems, *Mathematics and Computers in Simulation*, vol. 82, issue 8, pp. 1407-1418, ISSN: 0378-4754.

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K. Contracte de cercetare.

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L. Premii, distincţii.

Premiul Tudor Tănăsescu al Academiei Române pe anul 2005 (acordat în 2007) pentru grupul de lucrări *Teoria mulţimilor invariante în analiza calitativă a sistemelor dinamice*

M. Alte realizări semnificative.

Data: 27.09.2025 Prof.dr.ing., mat. Mihaela-Hanako Matcovschi

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Onea Alexandru

A. Teza de doctorat.

1. Contribuţii privind implementarea pe sisteme multiprocesor a algoritmilor complecşi de conducere ierarhizată a proceselor industriale rapide, conducător Prof. Dr. ing. Eugen Balaban, septembrie 1996.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

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4. Mocanu, R., Onea, A.,The Detection of the Rotor Temperature in an Induction Machine Based on a Neural Network with Particle Filtering, 28th Mediterranean Conference on Control and Automation (MED), ELECTR NETWORK Date: SEP 15-18, 2020, pp. 1099-1103.
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7. Razvan Mocanu;Razvan C. Rafaila;Alexandru Onea, Predictive Control of PMSM in Stator Frame under Passivity Constrain, 24th International Conference on System Theory, Control and Computing (ICSTCC), 2020.
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9. Mocanu, R., Onea, A., Indoor and Outdoor Vehicle Localization using UWB Transceivers, 27th Mediterranean Conference on Control and Automation, pp. 299-303, Akko, Israel, JUL 01-04, 2019.
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11. Alexa, I.A., Puscasu, S.D. Onea, A., Dynamic programming for energy management of hybrid energy supply system of electric vehicles, 21st IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR THETA) Location: Cluj Napoca, ROMANIA ate: MAY 24-26, 2018.
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30. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi - nr5002/1996, poz. T4, grant 555, Beneficiar: M.I.S

31. Aplicaţii ale inteligenţei artificiale în conducerea sistemelor tehnice, Colectiv: Voicu,M., Lazăr,C., Păstrăvanu,O., Poli,E., Schonberger,Fr., Ifrim,S., Onea,A., Executant: Universitatea Tehnică Iaşi - nr. 5002/96 grant 136 - poz. 1, Beneficiar: M.I.S.

32. Conducerea sistemelor de tip descriptor, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Belţa, C., Postolache, M.,

Mustaţă, B., Executant: Universitatea Tehnică Iaşi - nr. 4002/1995, poz. B5, grant 497, Beneficiar: M.I.S,
33. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi, 4002/1995, poz. A15, grant 532, Beneficiar: M.I.S
34. Aplicaţii ale inteligenţei artificiale în conducerea sistemelor tehnice, Colectiv: Voicu,M., Lazăr,C., Păstrăvanu,O., Poli,E., Schonberger,Fr., Ifrim,S., Onea,A., Executant: Universitatea Tehnică Iaşi - nr. 4002/95 grant 480 -poz. A14, Beneficiar: M.I.S
35. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi - nr.3002/1994/10116-C2, Beneficiar: M.I.S
36. Aplicaţii ale inteligenţei artificiale în conducerea sistemelor tehnice, Colectiv: Voicu,M., Lazăr,C., Păstrăvanu,O., Poli,E., Schonberger,Fr., Ifrim,S., Onea,A., Executant: Universitatea Tehnică Iaşi - nr. 3002/94 - poz. C1, Beneficiar: M.I.S
37. Algoritmi şi programe pentru conducerea optimală din punct de vedere energetic a proceselor tehnologice, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi - 3002/1994, poz. A3, Beneficiar: M.I.S
38. Algoritmi şi programe pentru conducerea optimală din punct de vedere energetic a proceselor tehnologice, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi - 1080/1993, poz. A3, Beneficiar: M.I.S
39. Algoritmi şi programe pentru conducerea optimală din punct de vedere energetic a proceselor tehnologice, Colectiv: Boţan, C., Balaban, E., Huţanu, C., Pal, C., Pănescu, D., Onea, A., Dumbravă, S., Pricop, A., Postolache, M., Executant: Universitatea Tehnică Iaşi - nr.1540/2382/1991, Beneficiar: M.I.S.
40. Grant internaţional Joint European Project TEMPUS JEP 02011/1991 „Improvement in Automatic Control Technologies"- EU Grant No. ERB3510PL920636, derulat in perioada .1991-1993, membru în colectiv: A. Onea.
41. Utilizarea bazelor de date in sistemele expert destinate conducerii inteligente a proceselor industriale, Colectiv:Voicu,M., Lazar,C., Pastravanu,O., Marcu,T., Poli,E., Ifrim.S., Onea,A., Schonberger,Fr, Executant: Inst. Polit. Iasi - nr. 10354/28.11.91, Beneficiar: M.I.S.
42. Oferte educaţionale noi şi flexibile în învăţământul terţiar universitar şi non-universitar tehnic conforme cu cerinţele pieţei muncii în schimbare, grant POCU/320/6/21/122333, 2021-2023.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 27/11/2025

Prof. Dr. ing. Onea Alexandru:

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Kloetzer Marius

A. Teza de doctorat.

M. Kloetzer, *Symbolic Motion Planning and Control*, Ph.D. Thesis, Adviser prof. Calin Belta, Boston University, MA, USA, 2008.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

M. Kloetzer, *Symbolic Motion Planning and Control*, teză de doctorat publicată în 2008 de Ed. ProQuest, ISBN: 9780549547297.

C. Mahulea, M. Kloetzer, R. Gonzalez, *Path Planning of Cooperative Mobile Robots Using Discrete Event Models*, Wiley-IEEE Press, USA, 2020, ISBN: 9781119486329.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

M. Kloetzer, O. Păstrăvanu, *Instrumente MATLAB în studierea dinamicilor modelabile liniar*, Ed. Politehnium, Iaşi, 2014, ISBN: 978-973-621-425-7.

M. Kloetzer, L. Mirea, O. Păstrăvanu: *Sisteme liniare continue*, Ed. Politehnium, Iaşi, 2014, ISBN: 978-973-621-422-6.

Burlacu, M. Kloezer: *Controlul Sistemelor Mobile cu Roţi*, Ed. Performantica, Iaşi, 2014, ISBN: 978-606-685-157-2.

M. Kloetzer, *Strategii de planificare automată a roboților mobili*, Ed. Matrix Rom, București, 2012, ISBN: 978-973-755-791-9.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

M. Kloetzer, O. Păstrăvanu, *Modelarea sistemelor fizice – îndrumar de laborator*, Iași, 59 pg., 2012.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

În reviste cotate ISI:

S. Hustiu, C. Mahulea, M. Kloetzer, J.J. Lesage, *On multi-robot path planning based on Petri net models and LTL specifications*, IEEE Transactions on Automatic Control, vol. 69(9), pp. 6373-6380, 2024.

S. Hustiu, I. Hustiu, M. Kloetzer, C. Mahulea, *LTL Task Decomposition for 3D High-Level Path Planning*, Journal of Control Engineering and Applied Informatics, vol. 23(3), pp. 76-87, 2021.

M. Kloetzer, C. Mahulea, Path planning for robotic teams based on LTL specifications and Petri net models, Discrete Event Dynamic Systems, vol. 30 (1), pp. 55-79, 2020.

A. Burlacu, M. Kloetzer, C. Mahulea, *Numerical Evaluation of Sample Gathering Solutions for Mobile Robots*, Applied Sciences, Multidisciplinary Digital Publishing Institute, vol. 9 (4), pp. 791, 2019.

C. Mahulea, M. Kloetzer, *Robot planning based on boolean specifications using Petri net models*, IEEE Transactions on Automatic Control 63 (7), pp. 2218-2225, 2018.

M. Kloetzer, C. Mahulea, *LTL-based planning in environments with probabilistic observations*, IEEE Transactions on Automation Science and Engineering, vol. 12 (4), pp. 1407-1420, 2015.

M. Kloetzer and C. Mahulea, *A Petri net based approach for multi-robot path planning*, Discrete Event Dynamic Systems: Theory and Applications, vol. 24 (4), pp. 417-445, 2014.

N. Ghita and M. Kloetzer, *Trajectory Planning for a Car-Like Robot by Environment Abstraction*, Robotics and Autonomous Systems, vol. 60 (4), pp. 609–619, 2012.

D. Panescu, M. Kloetzer, A. Burlacu and C. Pascal, *Artificial Intelligence based Solutions for Cooperative Mobile Robots*, Journal of Control Engineering and Applied Informatics, vol. 14 (1), pp. 74-82, 2012.

X.C. Ding, M. Kloetzer, Y. Chen, and C. Belta, *Automatic Deployment of Robotic Teams, IEEE Robotics & Automation Magazine*, vol. 18 (3), pp. 75-86, 2011.

M. Kloetzer, C. Mahulea, C. Belta, and M. Silva, *An Automated Framework for Formal Verification of Timed Continuous Petri Nets*, IEEE Transactions on Industrial Informatics, vol. 6 (3), pp. 460-471, 2010.

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M. Kloetzer and C. Belta, *A Fully Automated Framework for Control of Linear Systems from Temporal Logic Specifications*, IEEE Transactions on Automatic Control, vol. 53 (1), pp. 287-297, 2008.

M. Kloetzer and C. Belta, *Temporal Logic Planning and Control of Robotic Swarms by Hierarchical Abstractions*, IEEE Transactions on Robotics, vol. 23 (2), pp. 320-331, 2007.

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I. Hustiu, C. Mahulea, M. Kloetzer, *Software tool for distribution of linear temporal logic specifications*, IFAC-PapersOnLine, vol. 56 (2), pp. 6087-6092, 2023.

S. Hustiu, C. Mahulea, M. Kloetzer, *Parallel Motion Execution and Path Rerouting for a Team of Mobile Robots*, IFAC-PapersOnLine, vol. 55 (28), pp. 73-78, 2022.

C. Mahulea, E. Montijano, M. Kloetzer, *Distributed multirobot path planning in unknown maps using Petri net models*, IFAC-PapersOnLine, vol. 53 (2), pp. 2063-2068, 2020.

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M. Kloetzer, D. Ardelean and O. Păstrăvanu, *Crearea unei biblioteci Simulink pentru exploatarea reţelelor neuronale în identificare*, Revista Română de Informatică şi Automatică, vol. 12 (2), pp. 53-64, 2002.

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G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I. Hustiu, M. Kloetzer and C. Mahulea, *Motion planning for mobile robots through iterative task allocation*, IEEE Conference on Control Technology and Applications (CCTA), San Diego, CA, USA, pp. 780-785, 2025.

- M.A. Barb-Ciorbea, M. Kloetzer, C. Mahulea, Planning strategy based on visibility graph and traveling salesman problem with time window constraints, 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 521-526, 2024.
- I. Hustiu, M. Kloetzer, C. Mahulea, Extension of a decomposition method for a global LTL specification, 28th International Conference on Emerging Technologies and Factory Automation (ETFA), Sinaia, Romania, 2023.
- S. Hustiu, D.V. Dimarogonas, C. Mahulea, M. Kloetzer, Multi-robot motion planning under MITL specifications based on time Petri nets, European Control Conference (ECC), Bucharest, Romania, 2023.
- I. Hustiu, C. Mahulea, M. Kloetzer, Distributing co-safe LTL specifications to mobile robots, 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 306-311, 2022.
- S. Hustiu, M. Kloetzer, A. López-Martínez, C. Mahulea, Whitening of greenhouse's roof using drones and Petri net models, 27th International Conference on Emerging Technologies and Factory Automation (ETFA), Stuttgart, Germany, 2022.
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- I. Hustiu, M. Kloetzer, C. Mahulea, Distributed path planning of mobile robots with LTL specifications, 24th International Conference on System Theory, Control and Computing (ICSTCC), pp. 60-65, 2020.
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- M. Kloetzer, A. Burlacu, G. Enescu, S. Caraiman, C. Mahulea, Optimal indoor goods delivery using drones, 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Zaragoza, Spain, pp. 1579-1582, 2019.
- E. Vitolo, C. Mahulea, M. Kloetzer. Path-planning in Discretized Environments with Optimized Waypoints Computation, IEEE 23rd International Conference on Emerging Technologies and Factory Automation (ETFA), pp. 729-735, 2018.
- S. Huştiu, M. Lupaşcu, Ş. Popescu, A. Burlacu, M. Kloetzer, Stable hovering architecture for nanoquadcopter applications in indoor environments, 22nd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 659-663, 2018.
- R. Gonzalez, M. Kloetzer, C. Mahulea, Comparative study of trajectories resulted from cell decomposition path planning approaches, 21st International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 49-54, 2017.
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M. Kloetzer, C. Mahulea, A Burlacu, Sample gathering problem for different robots with limited capacity, 20th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 490-495, 2016.

M. Kloetzer, C. Mahulea, Multi-robot path planning for syntactically co-safe LTL specifications, 13th International Workshop on Discrete Event Systems (WODES), Xi'an, China, pp. 452-458, 2016.

X. Wang, M. Kloetzer, C. Mahulea, M. Silva, Collision avoidance of mobile robots by using initial time delays, 54th IEEE Conference on Decision and Control (CDC), Osaka, Japan, 2015.

M. Kloetzer, C. Mahulea, R. Gonzalez, Optimizing Cell Decomposition Path Planning for Mobile Robots Using Different Metrics, International Conference on System Theory, Control and Computing (ICSTCC), Cheile Gradistei, Romania, pp.565-570, 2015.

A.E. Cozma, V.G. Seliman, A. Burlacu, M. Kloetzer, Numerical simulations and comparative study for auction-based sample gathering solutions, International Conference on System Theory, Control and Computing (ICSTCC), Cheile Gradistei, Romania, pp.93-98, 2015.

R. Gonzalez, C. Mahulea, M. Kloetzer, A Matlab-Based Interactive Simulator for Mobile Robotics, IEEE International Conference on Automation Science and Engineering (CASE), Gothenberg, Sweden, pp. 310-315, 2015.

M. Kloetzer, C. Mahulea, Accomplish Multi-Robot Tasks Via Petri Net Models, IEEE International Conference on Automation Science and Engineering (CASE), Gothenberg, Sweden, pp. 304-309, 2015.

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M. Kloetzer, C. Mahulea and J.M. Colom, Petri net approach for deadlock prevention in robot planning, 18th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Calgary, Italy, pp. 1-4, 2013.

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M. Kloetzer, S. Magdici, A. Burlacu, Experimental platform and Matlab toolbox for planning mobile robots, 16th International Conference on System Theory, Control, and Computing (ICSTCC), Sinaia, Romania, pp. 1-6, 2012.

M. Kloetzer and C. Mahulea, LTL planning in dynamic environments, 11th IFAC Int. Workshop on Discrete Event Systems (WODES), Guadalajara, Mexico, pp. 294-300, 2012.

Mahulea and M. Kloetzer, Online Petri Net Based Algorithm for Planning and Controlling Mobile Robots, 17th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Krakow, Poland, pp. 1-8, 2012.

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M. Kloetzer, X.C. Ding, and C. Belta, Multi-robot deployment from LTL specifications with reduced communication, 50th IEEE Conference on Decision and Control (CDC), Orlando, USA, pp. 4867-4872, 2011.

N. Ghita, M. Kloetzer, and O. Pastravanu, Probabilistic Car-Like Robot Path Planning from Temporal Logic Specifications, 15th International Conference on System Theory, Control, and Computing (ICSTCC), Sinaia, Romania, pp. 267-271, 2011.

M. Kloetzer and N. Ghita, Software Tool for Constructing Cell Decompositions, 7th IEEE Conference on Automation Science and Engineering (CASE), Trieste, Italy, pp. 507-512, 2011.

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_ N. Ghita and M. Kloetzer, Cell Decomposition-Based Strategy for Planning and Controlling a Car-like Robot, Proceedings of the 14th International Conference on System Theory and Control (ICSTCC), Sinaia, pp. 225-230, 2010.

_ M. Kloetzer, S. Itani, S. Birch, and C. Belta, On the Need for Communication in Distributed Implementations of LTL Motion Specifications, IEEE International Conference on Robotics and Automation (ICRA), Anchorage, Alaska, USA, pp. 4451-4456, 2010.

_ M. Lahijanian, M. Kloetzer, S. Itani, C. Belta and S. Andersson, Automatic deployment of autonomous cars in a robotic urban-like environment (RULE), IEEE International Conference on Robotics and Automation (ICRA), Kobe, Japan, pp. 2055-2060, 2009.

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_ M. Kloetzer and C. Belta, LTL planning for groups of robots, IEEE International Conference on Networking, Sensing, and Control (ICNSC), Ft. Lauderdale, FL, USA, pp. 578-583, 2006.

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J. Invenţii.

K. Contracte de cercetare/granturi.

_ Director proiect tinere echipe CNCS-UEFISCDI, cod PN-III-P1-1.1-TE-2016-0737, nr. 32/2018. Titlu proiect: „Navigarea roboţilor mobile cooperativi în aplicaţii complexe", perioadă desfășurare: mai 2018 – aprilie 2020, valoare totală: 420.000 lei.

_ Grant cercetare câştigat prin competiţie la Universitatea din Zaragoza, Spania, în proiectul "Mobility Grants for Guest Researchers at Campus Iberus", finanţat de Ministerul Educaţiei din Spania în cadrul programului internaţional al Campusului de Excelenţă Iberic. Durata mobilităţii a fost de două luni (mai-iunie 2014), suma totală 6.550 euro, link pagina programului: http://www.campusiberus.es/?page_id=4029&lang=en, lista propunerilor de proiect câştigate: http://www.campusiberus.es/wp-

content/uploads/2013/11/140224_RESOLUCION_ADJUDICACION_INVITADOS_IBERUS_FIRMADA1.pdf

Director proiect postdoctoral CNCSIS-UEFISCSU, cod PN-II-RU PD 333, nr. 47/28.07.2010. Titlu proiect: „Strategii automate de planificare și control a roboților mobili bazate pe specificații LTL", perioadă desfășurare: iulie 2010 – iulie 2012, valoare totală: 295.585,78 lei.

L. Premii, distincţii.

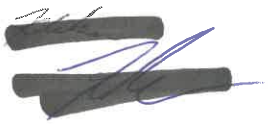
6 articole premiate in cadrul programului UEFISCDI PRECISI - Premierea Rezultatelor Cercetării: zonă roșie (2010 revistă TRO, 2010 TII, 2011 RAM, 2015 TASE, 2018 TAC), zonă galbenă (2012 RAS).

Premiul *HSCC Test-Of-Time Award 2025*, Marius Kloetzer și Calin Belta, pentru o lucrare din anul 2006: https://hscc.acm.org/2025/hscc-test-of-time-award/

M. Alte realizări semnificative.

Data: 29/09/2025

Prof.dr.ing. Kloetzer Marius

Semnătura: 

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Burlacu Adrian

A. Teza de doctorat.

Burlacu Adrian, *Algoritmi de procesare a imaginii pentru aplicații de urmărire a obiectelor în mișcare,* Universitatea Tehnică Gheorghe Asachi din Iași, 2009

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

Cb1: Condurache D., Burlacu A., (2014), *Recovering Dual Euler Parameters from Feature-Based Representation of Motion*, Jadran Lenarcic and Ousama Khatib (Eds), Advances in Robot Kinematics, pp. 295-305, ISBN 978-3-319-06698-1, © Springer International Publishing Switzerland.

Cb2: Lazar C., Burlacu A., Archip A. (2014), *Vision-Guided Robot Manipulation Predictive Control for Automating Manufacturing*, T. Borangiu et al. (eds.), Service Orientation in Holonic and Multi-agent Manufacturing and Robotics, Studies in Computational Intelligence, Vol.544, pp. 313-328, DOI: 10.1007/978-3-319-04735-5_21, © Springer International Publishing Switzerland.

Cb3 : Copot C., Lazăr L., Burlacu A.(2013), *Nonlinear Model based Predictive Control of Visual Servoing Systems using Image moments*, Advances in Intelligent Control Systems and Computer Science, Vol.187, pp.115-128, Publisher Springer, DOI: 10.1007/978-3-642-32548-9_9

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Adrian Burlacu şi Marius Kloezer, *Controlul Sistemelor Mobile cu Roţi*, Editura Performantica 2014

2. Adrian Burlacu, *Modeling and Predictive Control – Project Guide for Visual Servoing Systems*, Editura Performantica 2014.

3. Burlacu Adrian, "*Algoritmi de procesare a imaginii pentru aplicații de urmărire a obiectelor în mișcare*", Editura Politehnium, 2009, ISBN 978-973-621-237-6

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

Note de curs și Lucrări de laborator la disciplina Machine vision - Moodle edu.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Adrian-Paul Botezatu, Andrei-Iulian Iancu, Adrian Burlacu, Hybrid Deep Learning Framework for Eye-in-Hand Visual Control Systems, Robotics 14(5), 2025

2. AP Botezatu, A Burlacu, C Orhei, *A Review of Deep Learning Advancements in Road Analysis for Autonomous Driving*, Applied Sciences 14 (11), 2024
3. FA Brașoveanu, A Burlacu, *On Combining Shape Memory Alloy Actuators and Pneumatic Actuators for Performance Enhancement in Soft Robotics*, Actuators 13 (4), 2024
4. Adrian-Paul Botezatu, Lavinia-Eugenia Ferariu, Adrian Burlacu, *Enhancing Visual Feedback Control through Early Fusion Deep Learning*, Entropy, 2023
5. George-Iulian Uleru, Mircea Hulea, Adrian Burlacu,*Bio-Inspired Control System for Fingers Actuated by Multiple SMA Actuators*, Biomimetics, Vol.7(2), 2022
6. A.Burlacu, M. Kloetzer, C. Mahulea, *Numerical Evaluation of Sample Gathering Solutions for Mobile Robots*, Applied Sciences, Vol.9(4), 791-809, 2019
7. Doroftei, I., Chirita, D., Stamate, C., Cazan, S., Pascal, C. and Burlacu, A. (2021), "Robotic system design and development for automated dismantling of PCB waste", Industrial Robot, Vol. 48 No. 5, pp. 720-725.
8. Otilia Zvorișteanu, Simona Caraiman, Robert-Gabriel Lupu, Nicolae Alexandru Botezatu, Adrian Burlacu, Sensory Substitution for the Visually Impaired: A Study on the Usability of the Sound of Vision System in Outdoor Environments, Electronics 2021
9. M.Hulea, A. Burlacu, C. Caruntu, *Intelligent motion planning and control for robotic joints using bio-inspired spiking neural networks*, IJHR, 2019
10. S.Caraiman, O. Zvoristeanu, A. Burlacu, P.Herghelegiu, Stereo Vision Based Sensory Substitution for the Visually Impaired, Sensors, vol.19, pp.2771-, 2019
11. Burlacu A., Kloetzer M., Mahulea C, *Numerical Evaluation of Sample Gathering Solutions for Mobile Robots*, Applied Sciences, Vol 9 (4), 791-809, 2019
12. Condurache D., Burlacu A., *Onboard Exact Solution to the Full-Body Relative Orbital Motion Problem*, Journal of Guidance Control and Dynamics, accepted september 2016, online pp.1-11, 2016
13. Condurache D., Burlacu A., *Orthogonal dual tensor method for solving the AX=XB sensor calibration problem*, Mechanism and Machine Theory, Vol 10, pp382-404, 2016
14. Condurache D., Burlacu A. (2014), *Dual tensors based solutions for rigid body motion parameterization*, Mechanism and Machine Theory, Vol.74, pp.390-412.
15. Copot C., Burlacu A., Ionescu C., Lazar C., De Keyser R. (2013), *A Fractional Order Control Strategy for Visual Servoing Systems*, Mechatronics, Vol. 23, No.7, pp. 848-855.
16. Burlacu A., Copot C., Lazar C. (2013), *Predictive control architecture for real-time image moments based servoing of robot manipulators*, J. Intelligent Manufacturing
17. Copot C., Lazăr C., Burlacu A.(2012), *Predictive Control of Nonlinear Visual Servoing Systems using Image Moments*, IET Control Theory and Applications, Vol.6(10), pp. 1486-1496, ISSN 1751-8644
18. Burlacu A., Lazar C. (2012), *Reference Trajectory Based Visual Predictive Control*, Advanced Robotics, Vol.26, No.8-9
19. Panescu D., Kloetzer M., Burlacu A., Pascal C. (2012), *Artificial Intelligence based Solutions for Cooperative Mobile Robots*, Control Engineering and Applied Informatics, Vol. 14, No. 1, pp.74-82, ISSN 1454-8658
20. Burlacu A., Lazăr C. (2012), *A Behavior-based Visual Predictive Control Strategy*, Buletinul Institutului Politehnic din Iasi, Automatic Control and Computer Engineering section, Fasc.2, pp. 71-87, ISSN 1220-2169
21. Copot C., Burlacu A., Lazar C. (2011), *Image Moments based Predictive Control for Eye-in-Hand Servoing Systems*, Buletinul Instititului Politechnica din Iasi, Automatic Control and Computer Engineering section, Fasc. 1, pp. 23-37, ISSN 1220-2169
22. Burlacu A., Kloetzer M., Pănescu D. (2010): *Some AI based approaches on mobile robots motion planning*, Solid State Phenomena Journal, Vol.166-167, pp. 101-108, ISSN 1012-1394

G. **Lucrări ştiinţifice publicate în reviste din străinătate**.

H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.**

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Sopon I., D. Plescan, and A. Burlacu, Immersive Mixed Reality Framework for Enhanced Human-Robot Collaboration, 28th International Conference on System Theory, Control and Computing, Sinaia, România, 2024.
2. Ganciu A., A. Burlacu, and R. Roşca, A pose-free 2D-3D hybrid approach for visual servoing control systems, 28th International Conference on System Theory, Control and Computing, Sinaia, România, 2024.
3. Adrian Burlacu, Radu L Rosca, Andrei I Iancu, Enric Cervera, Pose-free visual servoing from 3D measurements, European Control Conference (ECC), 2023
4. Florian-Alexandru Brasoveanu, Adrian Burlacu, Towards independent SMA actuators: A novel analog two-state control system for flexible robots, IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA), 2023
5. Florian-Alexandru Brașoveanu, Adrian Burlacu, Soft Robotics: A Numerical Evaluation of Model-Based PneuNet Simulation, International Symposium on Measurements and Control in Robotics, 2023
6. Aura Ganciu, Adrian Burlacu, An Evaluation of the Dual Vectors Based Solutions for Robot-World/Hand-Eye Calibration, International Symposium on Measurements and Control in Robotics, International Symposium on Measurements and Control in Robotics,2023
7. Ionut Sopon, Cristina Tincu, Aura Ganciu, Adrian Burlacu, Mixed Reality Framework for Eye-in-Hand Collaborative Robot-Human Interaction, ICSTCC 2023
8. Adrian-Paul Botezatu, Lavinia Ferariu, Adrian Burlacu, Teodor Sauciuc, Visual Feedback Control using CNN Based Architecture with Input Data Fusion, 26th International Conference on System Theory, Control and Computing (ICSTCC), 2022
9. Teodor-Andrei Sauciuc, Adrian Burlacu, Lavinia Ferariu, Paul-Adrian Botezatu, SO3-CNN: Learning Rigid Displacement using Depth Images and Orthogonal Dual Tensors, IECON 2022–48th Annual Conference of the IEEE Industrial Electronics Society
10. Adrian-Paul Botezatu, Lavinia Ferariu, Adrian Burlacu, Teodor-Andrei Sauciuc, Early Fusion Based CNN Architecture for Visual Servoing Systems, 26th International Conference on Methods and Models in Automation and Robotics (MMAR), 2022
11. S. Huştiu, M. Lupaşcu, Ş. Popescu, A. Burlacu, M. Kloetzer, Stable hovering architecture for nanoquadcopter applications in indoor environments, 22nd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp.656-663, 2018
12. A Burlacu, S. Caraiman, A. Cozma, E. Dobrincu, R. Lupu, R. Miron, O. Zvoristeanu, Stereo vision based enviroment analysis and perception for autonomous driving applications, IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP), Cluj-Napoca, Romania, pp.281-286, 2018
13. A Birlutiu, A Burlacu, M Kadar, D Onita, Defect Detection in Porcelain Industry based on Deep Learning Techniques, 19th Int. Symposium and Numeric Algorithms for Scientific Computing, Timisoara, Romania, 263-270, 2017
14. P.Herghelegiu, A. Burlacu, S. Caraiman, Negative obstacle detection for wearable assistive devices for visually impaired, 21st Int. Conf. on System Theory, Control and Computing, Sinaia, Romania, pp.564-570, 2017
15. A. Burlacu, A. Baciu, V-I Manta, S. Caraiman, Ground geometry assessment in complex stereo vision based applications, 21st Int. Conf. on System Theory, Control and Computing, Sinaia, Romania, pp.558-563, 2017
16. M. Kloetzer, C. Mahulea, A. Burlacu, Sample Gathering Problem for Different Robots with Limited Capacity, proc.of 20th Int. Conf. on System Theory, Control and Computing, Sinaia, 13-15 Oct. Romania, pp.490-495, 2016
17. A. Zapodeanu, A. Burlacu, M. Kloetzer, On Some Implementation Issues in Robot-to-Area Allocation Problems, proc.of 20th Int. Conf. on System Theory, Control and Computing, Sinaia, 13-15 Oct. Romania, pp.496-501, 2016
18. A. Burlacu, A. Cohal. S. Caraiman, D. Condurache, Iterative Closest Point Problem: A Tensorial Approach to Finding the Initial Guess, proc.of 20th Int. Conf. on System Theory, Control and Computing, Sinaia, 13-15 Oct. Romania, pp.508-513, 2016
19. P.Herghelegiu, A. Burlacu, S. Caraiman, Robust ground plane detection and tracking in stereo sequences using camera orientation, proc.of 20th Int. Conf. on System Theory, Control and Computing, Sinaia, 13-15 Oct. Romania, pp.514-519, 2016

20. A. Burlacu, S. Bostaca, I. Hector, P. Herghelegiu, G. Ivanica, A. Moldoveanu, S. Caraiman,Obstacle Detection in Stereo Sequences using Multiple Representations of the Disparity Map, proc.of 20th Int. Conf. on System Theory, Control and Computing, Sinaia, 13-15 Oct. Romania, pp.514-519, 2016
21. Cozma A-E, Seliman V-G, Burlacu A., Kloetzer M., Numerical Simulations and Comparative Study for Auction-based Sample Gathering Solutions, 19th International Conference on System Theory, Control and Computing (ICSTCC), OCT 14-16, Cheile Gradistei, Romania, 2015
22. Condurache D., Burlacu A., Dual Lie Algebra Representations of the Rigid Body Motion, accepted at AIAA SPACE Forum, August 4-7, San Diego, 2014
23. Condurache D., Burlacu A., On Board Exact Solution to the Full Body Relative Orbital Motion Problem, accepted at AIAA SPACE Forum, August 4-7, San Diego, 2014
24. Burlacu A., Kloetzer M., Ostafi F., Optimal Multi-Agent Planning Solution for a Sample Gathering Problem, in proc. of the IEEE Int. Conf. on Automation, Quality and Testing, Robotics, May 22-24, pp.1-5, 2014
25. Tiganas V., Kloetzer K., Burlacu A., Multi-Robot based Implementation for a Sample Gathering Problem, in proc. of the 17th Int. Conference on System Theory, Control and Computing, Sinaia, Romania, October 11-13, pp. 545-550, 2013
26. Condurache D., Burlacu A., On Six D.O.F Relative Orbital Motion Parametrization Using Rigid Bases of Dual Vectors, AAS/AIAA Astrodynamics Specialist Conference, Hilton Head, South Carolina, August 11-15, pp. 2293-2312, 2013
27. Lazar C., Burlacu A., Archip A., Vision-guided Robot Manipulation Predictive Control for Automating Manufacturing, 3rd Int. Workshop on Service Orientation in Holonic and Multi Agent Manufacturing and Robotics, Valenciennes, France, June 20-22, 2013
28. Maxim A., Lazar C., Burlacu A., Copot C., Robotic visual servoing system based on SIFT features, 16th International Conference on System Theory, Control and Computing (ICSTCC), October 12-14, Sinaia, Romania, 2012
29. Kloetzer M., Magdici S., Burlacu A., Experimental platform and Matlab toolbox for planning mobile robots, 16th International Conference on System Theory, Control and Computing (ICSTCC), October 12-14, Sinaia, Romania, 2012.
30. Condurache D, Burlacu A., Rigid Body Pose Estimation using Dual Quaternions Computed from Direct Measurements, The 43rd International Symposium on Robotics (ISR2012), Taipei, Taiwan, Aug. 29-31, 2012
31. Burlacu A., Copot C., Lazar C., Predictive control architecture for real-time image moments based servoing of robot manipulators, The 14th IFAC Symposium on Information Control Problems in Manufacturing, Bucharest, Romania, May 23-25, 2012
32. Kloetzer M., Burlacu A., Pănescu D., On a Class of Multi-Robot Task Allocation Problems, Preprints of the 14th IFAC Symposium on Information Control Problems in Manufacturing, May 23-25, Bucharest, Romania, pp. 847 – 852, 2012.
33. Lazar C., Burlacu A., Copot C., Unified point and image moment features for image-based predictive visual servoing systems, accepted at The 13th International Conference on Optimization of Electrical and Electronic Equipment, Brasov, Romania, May 24-26, 2012
34. Lazar C., Burlacu A., Copot C., Predictive Control Architecture for Visual Servoing of Robot Manipulators, Preprints of the 18th IFAC World Congress, pp. 9464-9469, August 28 – September 2, Milano, Italy, 2011 ISBN: 978-3-902661-93-7.
35. Copot C., Burlacu A., Lazar C., Visual Predictive Control Architecture based on Image Moments for Manipulator Robots, Proc. of 2011 IEEE Symposium on Industrial Electronics, pp. 963-968, June 27-30, Gdansk, Poland, 2011 ISBN:978-1-4244-9311-1/11.
36. Burlacu A., Copot C., Cervera E., Lazar C., Real-Time Visual Predictive Control of Manipulation Systems, Proc. of The 15th International Conference on Advanced Robotics, pp. 383-388, June 20-23, Tallinn, Estonia, 2011 ISBN:978-1-4577-1157-2/11.
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40. Copot C., Burlacu A., Lazar C., Visual control architecture of servoing systems based on image moments, 12th Int. Conf. on Optimization of Electrical and Electronic Equipment (OPTIM), pp.801-806, 20-22 May, Cluj-Napoca, Romania, 2010 ISSN: 1842-0133.
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54. B. Boghiu, Burlacu A., Lazăr C., Image features detection using phase congruency, Proc. of 9th International Symposium on Automatic Control and Computer Science, Iasi, November 16-17, 2007 CD-ROM, ISSN 1843-665-X.
55. Lazăr C., Burlacu A.: Detection and Tracking of Feature Points in Image Sequences, Proc. of 12th IEEE Conference on Methods and Models in Automation and Robotics MMAR 2006, Międzyzdroje, 28-31 August 2006, ISBN 83 60140 93 6.

56. Burlacu A., Lazăr C.: Motion-Based Object Detection and Tracking in Image Sequences, Proc. of 5th International Conference on Advanced Engineering Design, Prague, 11-14 June 2006, (CD-ROM), ISBN: 80 86059 44 8 (Best Paper Award Student Competition)

J. Inventii.

K. Contracte de cercetare/granturi.

Membru (task manager) - Resilient Rapid ReconfiGurable pROdUction Process chains (R3GROUP), Horizon-243183-101091869 2023 – 2026.

Membru - Dezvoltarea unui sistem logistic inteligent utilizând roboți mobili omnidirecționali autonomi, PN-III-P2-2.1-PTE-2019-0731, 2020-2022;

Coordonator proiect – Algoritmi vizuali de percepție și predicție pentru estimarea mișcării vehiculelor inteligente, TUIASI-GI-2018-2392, 2018-2019;

Coordonator proiect – Studiu privind utilizarea unui robot ABB tip IRB6600 la schimbarea schemelor LBP11, feb–mar. 2019, beneficiar Arcelor Mittal;

Membru – Tehnologii inovative pentru recuperarea avansată a materialelor din deșeuri de echipamente informatice și de telecomunicații, PN-III-PCCDI-2017-0652, 2018-2021;

Membru – Navigarea roboţilor mobili cooperativi în aplicaţii complexe, PN-III-P1-1.1-TE-2016-0737, 2018–2020;

Membru – Sound of Vision, H2020 Grant no.643636, 2015–2018;

Membru – Îmbunătățirea procesului medical diagnostico-terapeutic prin folosirea unui sistem integrat de management al datelor clinico-paraclinice (USMED), 2014–2015;

Membru – Performanţă prin postdoctorat pentru integrarea în aria europeană de cercetare, PERFORMERA POSDRU/89/1.5/S/57649, 2010–2013;

Membru – Conducerea predictivă și în regim cooperant a sistemelor complexe, proiect bilateral România – Franța, contract finantare 306/27.04.2009, 2009–2011;

Membru – Tehnici avansate bazate pe vedere artificială pentru conducerea roboților, Grant CNCSIS-TIP A, COD 232, 2007–2008;

Coordonator proiect - Algoritmi de procesare a imaginii pentru aplicatii de urmarire, Grant tip Resurse Umane – Tineri Doctoranzi cu sursa de finantare UEFISCU.. Proiectul a fost pe o perioada de 12 luni, contract nr. 554/1.10.2007, cod TD-130

L. Premii, distincţii.

PN-III-P1-1.1-PRECISI-2017-18254 Premiu cercetare pentru articolul Condurache D., Burlacu A. (2016) Onboard Exact Solution to the Full-Body Relative Orbital Motion Problem, JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, pp.2638-2648

Medalia de aur salon Inventica 2014

PN-II-RU-PRECISI-2014-8-5585 - Premiu cercetare pentru articolul Condurache D., Burlacu A. (2014), Dual tensors based solutions for rigid body motion parameterization, Mechanism and Machine Theory, Vol.74, pp.390-412.

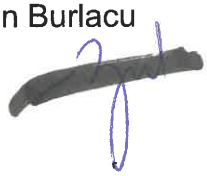
PN-II-RU-PRECISI-2012-6-1078 - Premiu cercetare pentru articolul Copot C., Lazăr C., Burlacu A. (2012), Predictive Control of Nonlinear Visual Servoing Systems using Image Moments, IET Control Theory and Applications, Vol. 6, No. 10, pp.1486-1496, ISSN 1751-8652..

PN-II-RU-PRECISI-2014-8-4420 - Premiu cercetare pentru articolul Copot C., Burlacu A., Ionescu C., Lazar C., De Keyser R. (2013), A Fractional Order Control Strategy for Visual Servoing Systems, Mechatronics, Vol. 23, No.7, pp. 848-855.

M. Alte realizări semnificative.

Data: 29/09/2025

Prof.univ.dr.ing. Adrian Burlacu
Semnătura:



LISTA DE LUCRĂRI

Candidat: DOSOFTEI CONSTANTIN-CĂTĂLIN

1° Teza de doctorat

T1 - Utilizarea inteligenței computaționale în conducerea proceselor, 2010, Universitatea Tehnică "Gheorghe Asachi" din Iasi, Domeniul AUTOMATICĂ, conducător de doctorat – prof. dr. ing. Corneliu BOȚAN

2° Cărţi/ cursuri/ manuale publicate în edituri recunoscute din ţară sau din străinătate (Ca1, Ca2 etc.), îndrumare publicate/culegeri de probleme (I1, I2 etc.), sisteme de laborator funcţionale etc. (D1, D2 etc.) cursuri proprii pe Web, sisteme e-learning etc. (W1, W2 etc.), după caz, precum şi alte lucrări (M1, M2 etc.) prin care se aduc *contribuţii la dezvoltarea activităţilor didactice/ profesionale.*

Ca	**Carte/ curs/ manual publicată în editură recunoscută CNCS (unic/ prim autor sau co-autor)**
	Ca1 - Olah I., Pal C., Mastacan L., **Dosoftei C.C.**, Procese şi instalaţii energetice nepoluante, Editura Politehnium, Iasi, 2009, ISBN 978-973-621-164-5 (301 pg – 4autori)
	Ca2 - C.-C. Dosoftei, Inteligenta computationala - Principii si aplicatii in controlul proceselor - Ed. Performantica 2019 ISBN 978-606-685-665-2 (179pg - 1autor)
	Ca3 - C. Boțan, **C.-C. Dosoftei,** Masini si actionari electrice - Ed. Politehnium 2019 ISBN 978-973-621-484-4 (348pg - 2 autori)
	Ca4 - Pricop A.T., **Dosoftei C.C.**, (2023), Controlul secvențial al proceselor folosind automate programabile, Editura Galaxia GUTENBERG 2023, Tg. Lăpuș, Romania, ISBN 978-630-6586-62-2, (249 pg - 2 autori)
	Ca5 - Postolache M., Horga V., **Dosoftei C.C.,** (2023), Reţele CANopen în automatizări industriale, Editura Universităţii Tehnice "Gheorghe Asachi" din Iaşi 2023, Iasi Romania, ISBN 978-973-621-529-2, (224 pg – 3 autori)
I	**Îndrumar/ culegere de probleme (publicat sau disponibil pe Web)**
	I1 - Dosoftei C.C., Gabor G. (2024), Îndrumar de laborator - Sisteme distribuite de achiziție, monitorizare și conducere, 270 pg, ISBN 978-973-621-546-9, Editura Universităţii Tehnice "Gheorghe Asachi" din Iaşi 2024
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D	**Sisteme de laborator funcţionale**
	Senzori inerțiali
	Traductoare numerice de deplasare și viteză
	Determinarea analitică a caracteristicii mecanice naturale pentru mașina sincronă cu magneți permanenți –Studiu de caz -mașina sincronă BSMS240-17-4800-48A (2 autori)
W	**Utilizarea sistemelor de predare/ învăţare/ evaluare de tip e-learning/ on-line/ multimedia etc.**
	Suport in format electronic .ppt pentru curs – disciplina Mașini și acționări electrice
	Support în format electronic .ppt pentru curs – disciplina Măsurări și traductoare

3° Cărţi/ capitole cărţi de specialitate publicate în edituri recunoscute din ţară sau din străinătate (Cb1, Cb2 etc.), articole/ studii publicate în reviste din ţară/ străinătate, cu factor de impact/ indexate în BDI/ neindexate în BDI (R1, R2 etc.), brevete de invenţie (B1, B2 etc.), creaţii artistice prezentate la manifestări recunoscute din ţară/ străinătate (A1, A2 etc.), articole/ studii publicate în volumele manifestărilor ştiinţifice naţionale/ internaţionale indexate BDI/ neindexate BDI (V1, V2 etc.), după caz, precum şi alte lucrări (N1, N2 etc.) prin care se aduc *contribuţii ştiinţifice la dezvoltarea domeniului.*

Cb	**Carte de specialitate/ capitol publicat în editură din ţară, recunoscută CNCS**
	Dosoftei C.C. & altii, (2022) , AFACERI DIGITALE, Antreprenoriat pentru ingineri domeniu electric, Editura Performantica 2022, Iasi Romania, 308 pg, Editor – Constantin SARMASANU-CHIHAI, ISBN 978-606-685-929-5, coautor 2 capitole - Capitolul 5 =14 pg (2 autori), Capitolul 8 = 30pg(2 autori)
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R	R1 - A. Tiganasu, C. Lazar, C. F. Caruntu, **C. Dosoftei**, Comparative Analysis of Advanced Cooperative Adaptive Cruise Control Algorithms for Vehicular Cyber Physical Systems , Journal of Control Engineering and Applied Informatics, ISSN 1454-8658l, Vol.23, No.1, pp. 82-92, 2021, Q3
	R2 - **Dosoftei, C.-C**.; Popovici, A.-T.; Sacaleanu, P.-R.; Gherghel, P.-M.; Budaciu, C. Hardware in the Loop Topology for an Omnidirectional Mobile Robot Using Matlab in a Robot Operating System Environment. Symmetry 2021, 13, 969. https://doi.org/10.3390/sym13060969, Q2
	R3 - Mocanu, R.; Onea, A.; **Dosoftei, C.C**. A Combined Model and Data-Driven Approach for the Determination of Rotor Temperature in an Induction Machine. Sensors 2021, 21, 4512. https://doi.org/10.3390/s21134512, Q2
	R4 - Popovici, A.-T.; **Dosoftei, C.-C.**; Budaciu, C. "Kinematics Calibration and Validation Approach Using Indoor Positioning System for an Omnidirectional Mobile Robot". Sensors 2022, 22, 8590, https://doi.org/10.3390/s22228590 (Q2)
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	R7 - **Dosoftei, C.-C.,** Alexa, L., "Students' perception of peer teaching in engineering education: a mixed–method case study", SPRINGERNATURE, eISSN 2662-9992 Humanit Soc Sci Commun 11, 793 (2024). https://doi.org/10.1057/s41599-024-03349-y (Q1)
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V	
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	V24 **Dosoftei C.,** Besancon A., Olah I., Mastacan L., *Robust control structure for a two-zone furnance* - Proc. of the 7th International Symposium on Automatic Control and Computer Science, SACCS 2001, Iași, România,2001, 4 pp., *(neindexată)*
	V25 **Dosoftei C.,** Olah, I., Mastacan, L., *PID vs. Fuzzy Control in Industrial Temperature Control Systems*, Proc. of 4th International Conference on Electromechanical and Power Systems, SIELMEN-2003, Chisinău, 2003, pp. 101-104 *(neindexată)*
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Data: 01.10.2025

CONSTANTIN-CĂTĂLIN DOSOFTEI

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Căruntu Constantin Florin

A. Teza de doctorat.

Controlul predictiv în rețea al proceselor rapide

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. **Căruntu C.F.**, *Lyapunov-Based Predictive Control Methodologies for Networked Control Systems*, Capitolul 5 din cartea Soft-Computing-Based Nonlinear Control Systems Design, Eds. U. P. Singh, A. Tiwari and R. K. Singh, un volum în Advances in Computer and Electrical Engineering (ACEE) Book Series, Ed. IGI Global, ISBN 978-152-253-531-7, Hershey PA, USA, 2018.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. **Căruntu C.F.**, A. Maxim, and C. Lazăr, *Advanced control strategies for networked/distributed systems – theory and applications*, Ed. MatrixRom, 2019, ISBN 978-606-250-504-2, 129 pag.

2. **Căruntu C.F.** and C. Lazăr, *Modelare şi control predictiv*, Ed. Politehnium, 2013, ISBN 978-973-621-413-4, 95 pag.

3. **Căruntu C.F.**, C. Budaciu and C. Lazăr, *Ingineria reglării automate*, Ed. Politehnium, 2013, ISBN 978-973-621-414-1, 93 pag.

4. **Căruntu C.F.**, *Networked predictive control for fast processes*, Ed. Politehnium, 2011, ISBN 978-973-621-332-8, 189 pag.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. *Controlul Sistemelor Auto* – Laborator + Proiect 2011-2012 și 2016-2024

2. *Transmisia Datelor – Controlul la Distanţă al Proceselor* – Curs 2011-2012 (partea a II-a: Controlul la Distanţă al Proceselor) și 2016-2024

3. *Transmisia Datelor – Controlul la Distanţă al Proceselor* – Laborator 2011-2012 (partea a II-a: Controlul la Distanţă al Proceselor) și 2016-2024

4. *Modelare şi Control Predictiv - proiect* – Curs 2011-2012 (partea a II-a: Controlul predictiv bazat pe modele intrare-stare-ieşire)

5. *Modelare şi Control Predictiv - proiect* – Laborator + Proiect 2011-2012

6. *Modeling and Predictive Control – project* – Curs engleza 2012-213 și 2017-2024

7. *Modeling and Predictive Control – project* – Lucrări de laborator și temă de proiect engleza 2012-213 și 2017-2024

8. *Transmisia Datelor* – Curs 2023-2024

9. *Controlul la Distanță al Proceselor* – Curs 2023-2024

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Vlășceanu I.M., V.C.D. Ceapă, I.Ș. Sacala, **C.F. Căruntu**, A.I. Udrea, N. Constantin, and M. Segărceanu, *Comparative Evaluation of Fuzzy Logic and Q-Learning for Adaptive Urban Traffic Signal Control*, Electronics, **14**(2759), 2025. (**IF: 2.6 – Q2**)

2. Alupoaei S.I. and **C.F. Căruntu**, *Optimizing Urban Traffic Efficiency and Safety via V2X: A Simulation Study Using the MOSAIC Platform*, Sensors, **25**(5418), 2025 (**IF: 3.5 – Q2**)

3. Păucă O., R.G. Lazăr, M. Postolache, and **C.F. Căruntu**, *DMPC-based control solution for mobile robots platoon based on ZigBee communication*, Computers and Electrical Engineering, 120, pp. 1-14, 2024. (**IF: 4.9 – Q1**)

4. Beți I.A., P.C. Herghelegiu, and **C.F. Căruntu**, *Architectural Framework to Enhance Image-Based Vehicle Positioning for Advanced Functionalities*, Information, **13**(2913), 2024. (**IF: 2.9 – Q2**)

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6. Maxim A., O. Păucă, and **C.F. Căruntu**, *Coalitional Distributed Model Predictive Control Strategy with Switching Topologies for Multi-Agent Systems*, Electronics, **13**(792), 2024. (**IF: 2.6 – Q2**)

7. Maxim A., O. Păucă, R.G. Amariei, F.C. Brăescu, and **C.F. Căruntu**, *Coalitional Control Strategy for a Heterogeneous Platoon Application*, Mathematics, **12**(7), 2024. (**IF: 2.2 – Q1**)

8. Bejenar I., L. Ferariu, C. Pascal, and **C.F. Căruntu**, *Aggregation Methods Based on Quality Model Assessment for Federated Learning Applications: Overview and Comparative Analysis*, Mathematics, **11**(4610), 2023. (**IF: 2.2 – Q1**)

9. Chindruș C. and **C.F. Căruntu**, *Securing the Network: A Red and Blue Cybersecurity Competition Case Study*, Information, **14**(587), 2023. (**IF: 2.9 – Q2**)

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11. Lazăr R.G., A.V. Militaru, **C.F. Căruntu**, C. Pascal, C. Pațachia-Sultănoiu, *Real-Time Data Measurement Methodology to Evaluate the 5G Network Performance Indicators*, IEEE Access, **11**, pp. 43909-43924, 2023. (**IF: 3.6 – Q2**)

12. Maxim A., O. Păucă, and **C.F. Căruntu**, *Distributed Model Predictive Control and Coalitional Control Strategies - Comparative Performance Analysis Using an Eight-Tank Process Case Study*, Actuators, **12**(281), 2023. (**IF: 2.3 – Q2**)

13. Chindruș A., D. Copoț, and **C.F. Căruntu**, *Predictive Control Strategy for Continuous Production Systems: A Comparative Study with Classical Control Approaches Using Simulation-Based Analysis*, Processes, **11**(1258), 2023. (**IF: 2.8 – Q3**)

14. Lazăr R.G., O. Păucă, A. Maxim, and C.**F. Căruntu**, *Control Architecture for Connected Vehicle Platoons: From Sensor Data to Controller Design Using Vehicle-to-Everything Communication*, Sensors, **23**, pp. 7576, 2023. (**IF: 3.5 – Q2**)

15. Mobayen S., A.N. Vargas, L. Acho, G. Pujol-Vasquez, and **C.F. Căruntu**, *Stabilization of two-dimensional nonlinear systems through barrier-function-based integral sliding-mode control: application to a magnetic levitation system*, Nonlinear Dynamics, **111**, pp. 1343-1354, 2023. (**IF: 6 – Q1**)

16. Vargas A.N., **C.F. Căruntu**, J.Y. Ishihara, and H. Bouzahir, *Stochastic stability of switching linear systems with application to an automotive powertrain model*, Mathematics and Computers in Simulation, 191, pp. 278-287, 2022. (**IF: 4.4 – Q1**)

17. Vargas A.N., J.G. Raminelli, M.A.F. Montezuma, A.A. Cavalini Junior, R. Breganon, and **C.F. Căruntu**, *Shaking Table Attached to Magnetorheological Damper: Simulation and Experiments for Structural Engineering*, Sensors, 22, pp. 3644, 2022. (**IF: 3.5 – Q2**)

18. Vargas A.N., J.Y. Ishihara, **C.F. Căruntu**, L. Zhang, and A.A.N. Djanan, *Model predictive control of switching continuous-time systems with stochastic jumps: Application to an electric current source*, IET Control Theory & Applications, 16, pp. 454-463, 2022. (**IF: 2.3 – Q2**)

19. Maxim A. and **C.F. Căruntu**, *Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications*, Sensors, 22, pp. 997, 2022. (**IF: 3.5 – Q2**)

20. Păucă O., A. Maxim, and **C.F. Căruntu**, *Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds*, IEEE Access, 9, pp. 153472-153490, 2021. (**IF: 3.6 – Q2**)

21. Maxim A. and **C.F. Căruntu**, *A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application*, Sensors, 21, pp. 4041, 2021. (**IF: 3.5 – Q2**)

22. Păucă O, A. Maxim, and **C.F. Căruntu**, *Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework*, Sensors, 21, pp. 3968, 2021. (**IF: 3.5 – Q2**)

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13. Păucă G.S. and **C.F. Căruntu**, *Trajectory Extraction from Online Mapping Platforms: Empowering Vehicle Dynamics and Intelligent Functionalities*, 27th International Conference on System Theory, Control and Computing, Timișoara, Romania, pp. 386-391, 2023.

14. Copoț D., **C.F. Căruntu**, C. Portier, R. De Keyser, and C.M. Ionescu, *An open source benchmark simulator for sustainable and flexible pharmaceutical manufacturing*,

28th International Conference on Emerging Technologies and Factory Automation, Sinaia, Romania, 2023.

15. Lazăr R.G. A.V. Militaru, and **C.F. Căruntu**, *Impact of Data Packet Loss for DSRC Vehicular Safety Communication in Connected Vehicle Platoons*, 28th International Conference on Emerging Technologies and Factory Automation, Sinaia, Romania, 2023.

16. Lazăr R.G. and **C.F. Căruntu**, *Evaluation of Channel Congestion for V2V Safety Communication in Multiplatooning Applications*, 65th International Symposium ELMAR, Zadar, Croatia, 2023.

17. Păucă G.S. and **C.F. Căruntu**, *Velocity Computation for Vehicle Trajectory Tracking: A Comparative Analysis of Performance and Efficiency*, 24th International Conference on Control Systems and Computer Science, Bucharest, Romania, 2023.

18. Chindruș C. and **C.F. Căruntu**, *Development and Testing of a Core System for Red and Blue Scenario in Cyber Security Incidents*, 15th International Conference on Security of Information and Networks, Sousse, Tunisia, 2022.

19. Militaru A.V., R.G. Lazăr, **C.F. Căruntu**, C.R. Comșa, and I. Bogdan, *Analysis of message flow transmissions for an inter-vehicle communication scenario*, 14th International Conference on Electronics, Computers and Artificial Intelligence, Ploiești, Romania, 2022.

20. Lazăr R.G., **C.F. Căruntu**, and C. Pațachia-Sultănoiu, *Simulated and practical approach to assess the reliability of the 5G communications for the Uu interface*, 14th International Conference on Communications, Bucuresti, Romania, 2022.

21. Militaru A.V., **C.F. Căruntu**, and C.R. Comșa, *Application Design Principles for Road Users' Safety*, International Symposium on Signals, Circuits and Systems, Iași, Romania, 2021.

22. Bonea A., C. Pațachia-Sultănoiu, M. Iordache, I. Constantin, A. Rădulescu, C.R. Comșa, and **C.F. Căruntu**, *Automated Onboarding, Testing and Validation Framework for NetApps*, International Symposium on Signals, Circuits and Systems, Iași, Romania, 2021.

23. **Căruntu C.F.**, A.V. Militaru, and C.R. Comșa, *Cyber-Physical Systems-based Architecture for Signalized Traffic Corridors: Monitoring and Synchronized Coordination*, 23rd International Conference on Control Systems and Computer Science, Bucharest, Romania, pp. 314-321, 2021.

24. **Căruntu C.F.**, V. Varga, and O. Păucă, *TrueTime-based analysis of the communication networks used in vehicle control structures*, 21st International Carpathian Control Conference, Stary Smokovec, Slovacia, 2020.

25. Căruntu C.F. and C. Lazăr, *Observer-based controller design for networked predictive control of an automotive drivetrain with backlash*, 19th IFAC World Congress, Cape Town, South Africa, pp. 10337-10342, 2014.

26. **Căruntu C.F.** and C. Lazăr, *Predictive compensation for network-induced time-varying delays*, 16th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2012.

27. **Căruntu C.F.** and C. Lazăr, *Real-time networked predictive control of a vehicle drivetrain with backlash*, IFAC Conference on Nonlinear Model Predictive Control (NMPC), Noordwijkerhout, The Netherlands, pp. 484-489, 2012.

28. **Căruntu C.F.**, D. Onu, and C. Lazăr, *Real-time simulation of a vehicle drivetrain controlled through CAN using a robust MPC strategy*, 15th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2011.

29. **Căruntu C.F.**, M. Lazăr, S. Di Cairano, R.H. Gielen, and P.P.J. v.d. Bosch, *Horizon-1 predictive control of networked controlled vehicle drivetrains*. IFAC World Congress, Milano, Italy, pp. 3824-3830, 2011.

30. **Căruntu C.F.** and C. Lazăr, *Stabilizing MPC for network-controlled systems with an application to DC motors*, IEEE International Conference on Mechatronics, Istanbul, Turkey, pp. 973–978, 2011.

31. **Căruntu C.F.**, A.E. Bălău, and C. Lazăr, *Networked predictive control strategy for an electro-hydraulic actuated wet clutch*, IFAC Symposium Advances in Automotive Control, Munchen, Germany, pp. 419–424, 2010.

32. **Căruntu C.F.** and C. Lazăr, *Predictive control for time-varying delay in networked control systems*, 8th IFAC Workshop on Time Delay Systems, Sinaia, Romania, pp. 49–54, 2009.

J. Invenţii.

1. **Căruntu C.F.** and A.D. Pușcașu, "*Ego motorcycle on-board awareness raising system, method for detecting and displaying presence of autonomous vehicles*", EP3799752B1, 2022, European Patents Office.

K. Contracte de cercetare/granturi.

1. **Manager de calitate educațională în cadrul proiectului** cu titlul "*Cross-Border Interconnected Mobile Networks for Education and Innovation (CONNECTINNO)*", ID ROMD00495, Programul Interreg VI-A NEXT România – Republica Moldova, Prioritatea 2: „Dezvoltarea socială transfrontalieră", director proiect: Conf.dr.ing. Ciprian-Romeo Comșa, perioada desfășurare: 09.2025-09.2028.

2. **Membru al proiectului** cu titlul: "HealthTech Connect - Tehnologie și inovare în sănătate", nr. 5FTT/2025, cod PN-IV-P7-7.4-FTT-2024-0063, de tipul Festival de Transfer Tehnologic, Programul 5.7 - Parteneriat pentru Inovare, Subprogramul 5.7.4 - Transfer tehnologic în sprijinul competitivității - pentru crearea și dezvoltarea de servicii CDI, de la Unitatea Executivă pentru Finanţarea Învățământului Superior, a Cercetării, Dezvoltării şi Inovării (UEFISCDI), director proiect: Conf.dr.ing. Lidia Alexa, perioada desfășurare: 06.2025-12.2025, valoare 498992 RON.

3. **Responsabil temă de cercetare** în cadrul proiectului cu titlul "*HUB Român de Inteșigență Artificială - HRIA*", cod SMIS+: 334906, apel nr. PCIDIF/484/PCIDIF_P1/RSO1.1/PCIDIF_A2, din cadrul Programului Creștere Inteligentă, Digitalizare și Instrumente Financiare 2021-2024, responsabil TUIASI: Prof.dr.ing. Vasile-Ion Manta, perioada desfășurare: 03.2025-12.2030.

4. **Membru al proiectului de cercetare** cu titlul "*TRials supported by Smart Networks beyond 5G (TrialsNet – Participation Rewarding)*", în Programul PN IV, subprogramul Rewarding Horizon Europe - Institutions, de la Unitatea Executivă pentru Finanţarea Învățământului Superior, a Cercetării, Dezvoltării şi Inovării (UEFISCDI), director proiect: Conf.dr.ing. Ciprian Comsa, perioada desfășurare: 11.2023-11.2024, valoare 115000 RON.

5. **Membru al proiectului de cercetare** cu titlul "*TRials supported by Smart Networks beyond 5G (TrialsNet)*", de la European Commission-EU in the Joint Undertaking Smart Networks and Services (JU-SNS), responsabil partener TUIASI partner: Conf.dr.ing. Ciprian Comsa, perioada desfășurare: 01.2023-12.2025, valoare 73000000 RON.

6. **Membru al proiectului** cu titlul "*Digital transformation for the professions of the future (DigitAll@TUIASI)*", PNRR prin Programul de Digitalizare al Universităților, Centru de inovare tematic: *Automotive Innovation Center*, responsabil partener TUIASI: Conf.dr.ing. Simona Caraiman, perioada desfășurare: 01.2022-12.2025, valoare: 27000000 RON.

7. **Director proiect** câştigat prin competiţie naţională cu titlul "*Flocking-based optimized control of cooperative automated vehicles (INTEROPERATE)*", PN-III-P1-1.1-TE-2019-1123 în Programul PN III Resurse Umare, subprogramul Tinere Echipe de Cercetare, de la UEFISCDI, nr. TE190/13.01.2021, perioada desfășurare: 01.2021-12.2022, valoare: 431542 RON.

8. **Coordonator de proiect** cu titlul "*Efficiency and Safety collaborative traffic functions in intelligent intersections (INTERACT)*", de la Orange Romania, perioada desfășurare: 12.2020-12.2025, valoare: 373000 RON.

9. **Membru al proiectului de cercetare** cu titlul "*Wireless System for Intelligent Applications in Safe Intersections (WiS4Iasi)*", PN-III-P2-2.1-PED2019-5296 în Programul PN III Competitivitate prin cercetare, dezvoltare și inovare, subprogramul Proiect experimental-demonstrativ, de la UEFISCDI, nr. 407PED/11.2020, director proiect:

Conf.dr.ing. Ciprian Comsa, perioada desfășurare: 11.2020-11.2022, valoare: 612000 RON.

10. **Membru al proiectului de cercetare** cu titlul "*Development of an intelligent logistics system using autonomous omnidirectional mobile robots (ROSY-LOGISTIC)*", PN-III-P2-2.1-PTE-2019-0731 în Programul PN III Competitivitate prin cercetare, dezvoltare și inovare, subprogramul Proiect experimental-demonstrativ, de la UEFISCDI, nr. 19PTE/2020, responsabil TUIASI: Conf.dr.ing. Constantin-Catalin Dosoftei, perioada desfășurare: 06.2020-05.2022, valoare: 1156989 RON.

11. **Mentor al directorului de proiect** cu titlul "*Coalitional distributed model predictive control strategies for dynamically coupled systems (LEADERS)*", PN-III-P1-1.1-PD-2019-0757 în Programul PN III Resurse Umane, subprogramul Proiecte de cercetare postdoctorala, de la UEFISCDI, director proiect: Ș.I.dr.ing. Anca Maxim, perioada desfășurare: 10.2020-09.2022, valoare: 246010 RON.

12. **Membru al proiectului de cercetare** cu titlul "*Bio-inspired electronic neural networks for the control of anthropomorphic robotic arms (ReNEIBCoBRA)*", no. GnaC2018_66, finanțat de ARUT, director proiect: Conf.dr.ing. Mircea Hulea, perioada desfășurare: 03.2019-05.2020, valoare 47400 RON.

13. **Director contract** cu agent economic cu titlul *Grid platooning by swarm intelligence*, finanțat de Continental Automotive Romania, 23928/31.10.2018, perioada desfășurare: 11.2018-12.2018, valoare 87722 RON.

14. **Director grant** intern câştigat în urma competiţiei naţionale pentru subprogramul Proiecte de cercetare pentru stimularea tinerelor echipe independente in cadrul programului PN III Resurse Umane, finanțat de Universitatea Tehnica "Gheorghe Asachi" din Iași, cu titlul *Control predictiv distribuit pentru maximizarea eficientei parcurilor eoliene (MAX-EOLIAN)*, având codul TUIASI-GI-2018-1654, perioada desfășurare: 01.06.2018-31.05.2019,valoare 10000 RON.

15. **Director grant de cercetare** individual câştigat prin competiţie internaţională cu titlul *Model predictive control for networked nonlinear systems*, având codul PNPD20132352, acordat de Agenţia Naţională Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) Brazilia, desfăşurat la Universidade Tecnológica Federal do Paraná (UTFPR), Campus Conelio Procopio, Parana, Brazilia, perioada desfăşurare: 01.11.2015-31.05.2016, valoare: 28700 BRL = 8610 EUR = 38800 RON.

16. **Director proiect** câştigat prin competiţie naţională cu titlul *Control predictiv bazat pe agenţi pentru plutoanele de autovehicule* având codul PN-II-RU-TE-2014-4-0970 în cadrul Programului PN II Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea constituirii de tinere echipe de cercetare independente, finanţat de Unitatea Executivă pentru Finanţarea Învătământului Superior, a Cercetării, Dezvoltării şi Inovării (UEFISCDI), contract nr. 273/01.10.2015, perioada desfăşurare: 01.10.2015-30.09.2017, valoare 520640 RON.

17. **Responsabil proiect** de cercetare câştigat prin competiţie cu tema *Proiectare asistată de calculator a echipamentelor mecanice sub presiune, nesupuse la flacără în scopul creşterii siguranţei în funcţionare şi optimizării raportului cost-investiţie*, încheiat între SC ALCOR PRO CONSULT SRL şi Universitatea Tehnică „Gheorghe Asachi" din Iaşi, contract nr. 139/28.10.2013, perioada desfăşurare: 28.10.2012-06.12.2013, valoare: 4000 RON.

18. **Investigator principal** în cadrul proiectului de cercetare tip PNII cu titlul *Tehnologii informatice de timp real pentru sistemele încorporate care asigură controlul lanţului de transmisie a puterii la autovehicule (SICONA)*, în Programul 4 – Parteneriate în domeniile prioritare, Contract nr. 12100/01.10.2008, Perioada de desfăşurare: 10.2008-09.2011, director proiect: Prof. dr. ing. Corneliu Lazăr, valoare 316105 RON.

19. **Doctorand** în cadrul unui grant din fonduri structurale cu componente de cercetare: "BURSE DOCTORALE – O investitie în inteligenta (BRAIN)" ID 6681, proiect strategic finanţat în perioada 2008-2011, cu tema: Controlul predictiv în reţea al proceselor rapide, valoare 72150 RON.

L. Premii, distincţii.

1. The Research Excellence Award for the young researcher with the best performance in scientific research was awarded in 2019 by the Gheorghe Asachi Technical University of Iași, Romania.

2. Lucrarea "*Model predictive control of switching continuous-time systems with stochastic jumps: Application to an electric current source*" (autori: Vargas A.N., J.Y. Ishihara, **C.F. Căruntu**, L. Zhang, and A.A.N. Djanan) publicată în revista *IET Control Theory & Applications* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Engineering, Electrical & Electronic.

3. Lucrarea "*Shaking Table Attached to Magnetorheological Damper: Simulation and Experiments for Structural Engineering*" (autori: Vargas A.N., J.G. Raminelli, M.A.F. Montezuma, A.A. Cavalini Junior, R. Breganon, and **C.F. Căruntu**) publicată în revista *Sensors* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: Instruments & Instrumentation.

4. Lucrarea "*Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications*" (autori: Maxim A., and **C.F. Căruntu**) publicată în revista *Sensors* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: Instruments & Instrumentation.

5. Lucrarea "*Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds*" (autori: Păucă O, A. Maxim, and **C.F. Căruntu**) publicată în revista *IEEE Access* a fost premiată de către UEFISCI în programul de "premiere a

rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: Engineering, Electrical & Electronic.

6. Lucrarea *"Adaptive SNN for Anthropomorphic Finger Control"* (autori: Hulea M., G.I. Uleru, and **C.F. Căruntu**) publicată în revista *Sensors* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Instruments & Instrumentation.

7. Lucrarea *"A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application"* (autori: Maxim A. and **C.F. Căruntu**) publicată în revista *Sensors* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Instruments & Instrumentation.

8. Lucrarea *"Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework"* (autori: Păucă O., A. Maxim, and **C.F. Căruntu**) publicată în revista *Sensors* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Instruments & Instrumentation.

9. Lucrarea *"Stability of switching linear systems with switching signals driven by stochastic processes"* (autori: Vargas A.N., **C.F. Căruntu**, and J.Y. Ishihara) publicată în revista *Journal of the Franklin Institute* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Engineering, Multidisciplinary.

10. Lucrarea *Driveline oscillations damping: A tractable predictive control solution based on a piecewise affine model* (autori: **Căruntu C.F.**, A.E. Bălău, M. Lazăr, Paul P.J.v.d. Bosch and S. Di Cairano) publicată în revista *Nonlinear Analysis: Hybrid Systems* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: *Automation and Control Systems.*

2. Lucrarea *Observer-based predictive controller desgin with network-enhaced time-delay compensation* (autor: **Căruntu C.F.**) publicată în revista *International Journal of General Systems* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: *Computer Science, Theory and Methods.*

3. Lucrarea *Network delay predictive compensation based on time-delay modeling as disturbance* (autori: **Căruntu C.F.** and C. Lazăr) publicată în revista *International Journal of Control* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: *Automation & Control Systems*.

4. Lucrarea *Lyapunov based predictive control of vehicle drivetrains over CAN* (autori: **Căruntu C.F.**, M. Lazăr, R.H. Gielen, P.P.J. van den Bosch and S. di Cairano) publicată în revista *Control Engineering Practice* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: *Automation & Control Systems*.

5. Lucrarea *Robustly stabilising model predictive control design for networked control systems with an application to direct current motors* (autori: **Căruntu C.F.** and C. Lazăr) publicată în revista IET Control Theory and Applications a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: *Engineering, Mechanical.*

6. Lucrarea *Simulation and control of an electro-hydraulic actuated clutch (*autori: Bălău A.E., **C.F. Căruntu** and C. Lazăr*)*, publicată în revista *Mechanical Systems and Signal Processing* a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: *Engineering, Mechanical*.

M. Alte realizări semnificative.

1. 35 lucrări ştiinţifice comunicate la Conferinţe Internaţionale

2. peste 530 citări conform ISI Web of Knowledge (fără autocitări) și peste 1.300 citări conform Google Scholar (fără autocitări)

Data: 29/09/2025

Prof.dr.ing. Căruntu Constantin Florin
Semnătura:

Lista de lucrări

Numele şi prenumele: Fetcu Dorel

A. Teza de doctorat.

Proprietati ale aplicatiilor si morfismelor armonice, Universitatea Al. I. Cuza, 2005.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. D. Fetcu, A. L. Pinheiro, Subvariedades biharmonicas em variedades Riemannianas (in limba portugheza), EDUFBA, Salvador, Brazilia, 2018. ISBN: 978-85-232-1752-5

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. D. Fetcu, A. L. Pinheiro, Subvarietati biarmonice in varietati riemanniene (traducerea in limba romana a cartii B.1), Casa Editoriala Demiurg, Iasi, 2016. ISBN 978-973-152-337-8
2. D. Fetcu, Elemente de algebra liniara, geometrie analitica si geometrie diferentiala, Casa Editoriala Demiurg, Iasi, 2009. ISBN 978-973-152-128-2
3. G. Cretu, D. Fetcu, and G. Teodoru, An Introduction to Linear Algebra, Analytic Geometry, and Differential Geometry. Syntheses and Problems (in Romanian), PIM Publishing House, Iasi, Romania, 2024, 394 pp. ISBN 978-606-13-8285-9

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. G. Teodoru, D. Fetcu, Algebra liniara, geometrie analitica si diferentiala (culegere de probleme), Rotaprint, 2004.
2. G. Teodoru, D. Fetcu, Analiza matematica (culegere de probleme), Rotaprint, 2004.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. D. Fetcu, Submanifolds with Parallel Mean Curvature and Biharmonic Submanifolds in Riemannian Manifolds, www.researchgate.net, 2017, DOI: 10.13140/RG.2.2.29610.11204.
2. D. Fetcu, Properties of Harmonic Mappings and Morphisms (in limba romana), Differential Geometry -- Dynamical Systems Monographs 5, Geometry Balkan Press, Bucuresti, Romania, http://www.mathem.pub.ro/dgds/mono/dgdsmono.htm

F. Lucrări ştiinţifice publicate în reviste WoS sau indexate în baze de date internaţionale.

1. D. Fetcu, Biconservative surfaces in S^2xR and H^2xR, J. Math. Anal. Appl. 554(1), 2026, Paper No. 129922, 16 pp. (WoS)
2. D. Fetcu, Simons type formulas for surfaces in Sol_3 and applications, Bull. Math. Sci. 13, 2023, Paper No. 2350007, 15 pp (WoS)
3. H. Bibi, B.-Y. Chen, D. Fetcu, and C. Oniciuc, Parallel mean curvature biconservative surfaces in complex space forms, Math. Nachr. 296, 2023, 3192—3221. (WoS)
4. D. Fetcu, C. Oniciuc, Biharmonic and biconservative hypersurfaces in space forms, Differential Geometry and Global Analysis: In Honor of Tadashi Nagano, 65--90, Contemp. Math., 777, Amer. Math. Soc., Providence, RI, 2022. (WoS)

5. D. Fetcu, E. Loubeau, and C. Oniciuc, Bochner-Simons formulas and the rigidity of biharmonic submanifolds, J. Geom. Anal. 31, 2021, 1732—1755. (WoS)
6. D. Fetcu, E. Loubeau, and C. Oniciuc, Biharmonic tori in spheres, Differential Geom. Appl. 54(Part A), 2017, 208—225. (WoS)
7. M. Batista, M. P. Cavalcante, D. Fetcu, Constant mean curvature surfaces in M^2(c)xR and finite total curvature, J. Geom. Anal. 27 (2017), 3071-3084. (WoS)
8. D. Fetcu, S. Nistor, C. Oniciuc, On biconservative surfaces in 3-dimensional space forms, Comm. Anal. Geom. 24 (2016), 1027-1045. (WoS)
9. D. Fetcu, A. L. Pinheiro, Biharmonic surfaces with parallel mean curvature in complex space forms, Kyoto J. Math. 55 (2015), 837-855. (WoS)
10. D. Fetcu, A classification result for helix surfaces with parallel mean curvature in product spaces, Ark. Mat. 53 (2015), 249-258. (WoS)
11. D. Fetcu, H. Rosenberg, Surfaces with parallel mean curvature in Sasakian space forms, Math. Ann. 362 (2015), 501-528. (WoS)
12. D. Fetcu, C. Oniciuc, A. L. Pinheiro, CMC biconservative surfaces in S^nxR and H^nxR, J. Math. Anal. Appl. 425 (2015), 588-609. (WoS)
13. D. Fetcu, H. Rosenberg, Surfaces with parallel mean curvature in CP^nxR and CH^nxR, Trans. Amer. Math. Soc. 366 (2014), 75-94. (WoS)
14. D. Fetcu, H. Rosenberg, On complete submanifolds with parallel mean curvature in product spaces, Rev. Mat. Iberoam. 29(4), 2013, 1283-1306. (WoS)
15. D. Fetcu, C. Oniciuc, H. Rosenberg, Biharmonic submanifolds with parallel mean curvature in S^nXR, J. Geom. Anal. 23(4), 2013, 2158-2176. (WoS)
16. D. Fetcu, H. Rosenberg, Surfaces with parallel mean curvature in S^3XR and H^3XR, Michigan Math. J. 61(4), 2012, 715-729. (WoS)
17. D. Fetcu, Surfaces with parallel mean curvature vector in complex space forms, J. Differential Geom. 91(2), 2012, 215-232. (WoS)
18. D. Fetcu, C. Oniciuc, Biharmonic integral C--parallel submanifolds in 7-dimensional Sasakian space forms,Tohoku Math. J. 64(2), 2012, 195—222. (WoS)
19. D. Fetcu, H. Rosenberg, A note on surfaces with parallel mean curvature, C. R. Math. Acad. Sci. Paris 349(21--22), 2011, 1195—1197. (WoS)
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4. D. Fetcu, Some properties of nearly S-manifolds, Sci. Ann. Univ. Agric. Sci. Vet. Med., Proceedings of the 5th Annual Symposium on Mathematics Applied in Biology and Biophysics, 16--17 June 2006, Iasi, 49(2), 2006, 229—242.
5. D. Fetcu, An adapted connection on a strict complex contact manifold, Proceedings of the 5th Conference of Balkan Society of Geometers, 29 August--2 September 2005, Mangalia, Romania, BSG Proceedings 13, 2006, Geometry Balkan Press, Bucharest, 54—61.
6. D. Fetcu, A class of harmonic maps between 3-cosymplectic manifolds, Sci. Ann. Univ. Agric. Sci. Vet. Med., Proceedings of the 4th Annual Symposium on Mathematics Applied in Biology and Biophysics, 27--28 May 2005, Ia\c{s}i, 48(2), 2005, 303—316.
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8. D. Fetcu, Some results on the hyper--framed manifolds, Sci. Ann. Univ. Agric. Sci. Vet. Med., Proceedings of the Annual Symposium on Mathematics Applied in Biology and Biophysics, 28--29 May 2004, Iasi, 47(2), 2004, 151—163.

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H. Contracte de cercetare.

1. Grant PN-II-RU-TE-2014-4-0004, CNCS-UEFISCDI, 1 octombrie 2015 – 30 septembrie 2017 (Director D. Fetcu)
2. Bolsa Atração de Jovens Talentos (BJT - Nivel A), Ciências Sem Fronteiras, CNPq, Brazilia, 1 iulie 2013 - 30 aprilie 2015 (nr. Grant BJT 373672/2013–6, beneficiar D. Fetcu)
3. Pos-Doutorado Sênior (PDS), FAPERJ, Rio de Janeiro, RJ, Brazilia, 1 martie 2011 - 29 februarie 2012 (nr. Grant E-26/102.878/2010, beneficiar D. Fetcu)
4. Pos-Doutorado Junior (PDJ), CNPq, Brazilia, 1 martie 2010 - 28 februarie 2011 (nr. Grant 150138/2010-5, beneficiar D. Fetcu)

I. Premii, distincţii.

18 articole premiate de CNCS-UEFISCDI prin programul „Premierea rezultatelor cercetarii" din cadrul PN II si PN III, intre 2008 si 2021.

Data, 26/09/2025

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Postolache Mihai

A. **Teza de doctorat.**

1. Contribuţii la conducerea distribuită a proceselor", conducător ştiinţific prof. dr. ing. Corneliu Huţanu, 2003

B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**

1. Huţanu, C., Postolache, M., On The Structural System Analysis In Distributed Control, Advances In Automatic Control, M. Voicu (Ed.), Kluwer Academic Publishers, Boston/Dordrecht/London, pp.129-140, (2003)

C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).**

1. Postolache, M., Horga, V., Dosoftei, C.C., Rețele CANopen în automatizări industriale, Ed. Universității Tehnice Gheorghe Asachi din Iasi, 224 pg., (2023) ISBN 978-973-621-529-2
2. Postolache, M., Sisteme cu microprocesoare, Ed. Conspress, București, 2013, ISBN 978-973-100-265-1.
3. Pricop, A., Postolache, M., Mastacan, L., Platforma de automatizare si simulare a proceselor industriale, Ed. Conspress, Bucuresti, 2013, ISBN 978-973-100-283-5.
4. Postolache, M. Postolache, M., Parametri electro-optici ai cristalelor lichide determinaţi cu radiaţii total polarizate, Editura Tehnopress, 2011, ISBN 978-973-702-914-0.
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D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.**

1. Huţanu, C., Postolache, M., Microcontrolere MCS 51 şi compatibile. Arhitectură şi programare., 344 pg. (2001) ISBN 9975-63-102-9
2. Huţanu, C., Postolache, M., Sisteme cu microprocesoare în conducerea automată a proceselor. Vol. II, Ed. Tehnica-Info, Chişinău, 312 pg., (2001) ISBN 9975-63-166-8
3. Postolache, M., Comunicaţii în sisteme de conducere. Îndrumar de laborator, Ed. Tehnica Info, Chişinău, 2005, 180 pg., ISBN 9975-63-164-4

E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.**

F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.**

F1 – lucrări cotate ISI

1. Pauca, O., Lazar, R.G., **Postolache, M.**, Caruntu, C.F., DMPC-based control solution for mobile robots platoon based on ZigBee communication, Computers and Electrical Engineering, Volume 120, Part B, 2024, 10975
2. Androne, D.A.M., Nechifor, C., **Postolache, M**., Dimitriu, D.G., Dorohoi, D.O., LINEAR BIREFRINGENCE OF UNIAXIAL ANISOTROPIC INORGANIC CRYSTALS MEASURED BY ELLIPSOMETRIC MEANS, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS , ISSN: 1223-7027, vol. 85, issue 2, 2023, WOS:001020946800018
3. Dorohoi, D.O, **Postolache, M.**, Nechifor, C.D., Dimitriu, D.G., Albu, R.M., Stoica, I, Barzic, A.I., Review on Optical Methods Used to Characterize the Linear Birefringence of Polymer Materials for Various Applications, Molecules, EISSN: 1420-3049, vol. 28, issue 7, 2023, DOI10.3390/molecules 28072955
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6. **Postolache, M.**, Ivan, L.M., Puica-Melniciuc, N., Mariciuc, G.G., Dimitriu, D.G., Dorohoi, D.O., Birefringence of binary liquid crystalline mixtures of MBBA and PPMAECOBA in TCM, interferometric assessment, MOLECULAR CRYSTALS AND LIQUID CRYSTALS, ISSN: 1542-1406, Volume: 698 Issue: 1, 2020, pp.78-86, DOI: 10.1080/15421406.2020.1731089
7. Barzic, A.I., Albu, R.M., Nechifor, C.D., **Postolache, M.**, Logigan, C., Dorohoi, D.O., Surface Processing of Polyethylene Terephthalate for Orientation of Nematics in Display Devices, MATERIALE PLASTICE, ISSN: 2668-8220, Volume:57, Issue: 2, 2020, pp.1-7, DOI: 10.37358/MP.0.0.5344
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10. **Postolache, M.,** Hutanu, C., Panescu, D., Pricop, A., A Communicating Process Model To Deal With Distributed Systems, Buletinul Institutului Politehnic Iasi, Tomul XLIII (XLVII), Fasc. 1-4, Sectia IV, Automatica si Calculatoare, 1997, pg. 27 – 36, ISSN 1220 2169, (Indexată ZENTRALBLATT MAT).
11. Hutanu, C., **Postolache, M.,** Pricop, A., Panescu, D., Low Cost Automation Distributed Systems Buletinul Institutului Politehnic Iasi, Tomul XLII (XLVI), Fasc. 1-4, Sectia IV, Automatica si Calculatoare, 1996, pg. 123 - 130 (indexată în Zentralblatt MATH Database 1931 – 2007, index 0900.68069).

12. Pricop, A., Huţanu, C., Pănescu, D., **Postolache, M.,** Fuzzy Algorithms For Traffic Control, Buletinul Institutului Politehnic din Iaşi, Fasc.5, Secţ. III, pg. 887-896, tom XLI (XLV) (1995) (ZentralBlatt Math)
13. Pricop, A., Huţanu, C., Pănescu, D., **Postolache, M.**, Some Aspects On Variable Fuzzification For The Control Of Real Processes, Buletinul Institutului Politehnic din Iaşi, Fasc.5, Secţ. III, pg. 881-886, tom XLI (XLV) (1995) (ZentralBlatt Math)
14. Pănescu, D., Huţanu, C., **Postolache, M.,** A Knowledge Based Control System For A Multirobot Workcell, Buletinul Institutului Politehnic din Iaşi, Fasc.1-4, Secţ. IV, pg. 99-102, tom XL (XLIV) (1994) (ZentralBlatt Math)

G. **Lucrări ştiinţifice publicate în reviste din străinătate.**

H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.**

I. **Lucrări ştiinţifice publicate în volumele conferinţelor.**

I1 – Conferințe indexate ISI Web of Science

1. Abăceoae, C., **Postolache, M.**, Design and Implementation of a CAN-USB Interface for Networked Embedded Systems, 22nd International Conference on System Theory, Control and Computing (ICSTCC), October 10-12, 2018, Sinaia, Romania, ISBN: 978-1-5386-4443-0, 2018, pp. 123-128
2. Agape, A., **Postolache, M.**, Internet-enabled Access Control System using a Mobile Application, 22nd International Conference on System Theory, Control and Computing (ICSTCC), October 10-12, 2018, Sinaia, Romania, ISBN: 978-1-5386-4443-0, 2018, pp. 244-249
3. **Postolache, M.**, A MODBUS/SLLDN Gateway Implementation for Interfacing WSANs to SCADA Systems, 21st International Conference on System Theory, Control and Computing (ICSTCC), October 19-21, 2017, Sinaia, Romania, ISBN 978-1-5386-3842-2, pp 665-670
4. **Postolache, M.**, Time-Triggered CANopen Implementation for Networked Embedded Systems, Proceedings of the 20th International Conference on System Theory, Control and Computing (ICSTCC), October 13-15, 2016, Sinaia, Romania, pp. 168-173
5. **Postolache, M.**, CANopen Implementation Using BCP Protocols over TIA-485 in Networked Embedded Systems, Proceedings of the 19th International Conference on System Theory, Control and Computing, October 14-16, Cheile Gradistei, Romania, 2015, pp. 693-698
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I2 – Conferințe indexate BDI

1. **Postolache, M.**, Generalized Media Access Control Algorithms for Embedded Network Systems, Proceedings of the 18th International Conference on System Theory, Control and Computing, Sinaia, Romania, October 17-19, 2014, pp. 580-585 (IEEExplore)

2. **Postolache, M.,** Probe-based Distributed Algorithms for Deadlock Detection, Proceedings of the 16th International Conference on Systems Theory, Control and Computers, October 12-14, Sinaia, 2012 (IEEExplore)
3. **Postolache, M., Spiridon, C., *XCPI – A Measurement and Calibration Software Tool for Networked and Embedded Control Systems*, Proceedings of the 14th International Conference on Systems Theory and Control, pp. 397-402, October 17-19, Sinaia, 2010**
4. Dorohoi, D., Postolache, M., Ionescu, D., Dimitriu, D.G., **Postolache, M.**, *Dipole Moments and Polarizabilities in the Excited States of some Carbanion Disubsituted Pyridinium Ylids*, 1st Conference on Isotopic and Molecular Processes, Cluj-Napoca, 1999
5. Pricop, A., Hutanu, C., Panescu, D., **Postolache, M.**, An Intelligent Decision Making Process For The Control Of Guided Mobile Robots, Proceedings of IFAC Workshop on Intelligent Manufacturing Systems 1995, Pergamon Press, Oxford, 1997, pg. 91 – 95, ISBN 0-08-042595X (Indexata Inspec).

I3 – Alte conferințe

1. Huţanu, C., Pănescu, D., Pricop, A., **Postolache, M.**, Manole, B., Novac, R., Realizarea unui sistem de conducere pentru robotul RIP 0,2 cuplabil cu un microcalculator IBM PC. *Lucrările celui de-al III-lea simpozion "Structuri, algoritmi şi echipamente de conducere a proceselor industriale"*, vol.I, secţiunea B, pp. 159-166, Iaşi (1991).
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3. Pănescu, D., Huţanu, C., **Postolache, M.**, Croitoru, O., Pricop, A., An Expert System Approach for a Thermal Treatment Process. *Prep. of the 4th International Symposium on Automatic Control and Computer Science – SACCS'93*, Iaşi, pp. 167-172, (1993).
4. Pănescu, D., Huţanu, C., **Postolache, M.,** A Knowledge Based Control System For A Multirobot Workcell. *Proceedings of the International Workshop on Advanced Approaches in Industrial Control Systems*, Prague, pp. 137-140, (1993).
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6. Boţan, C., **Postolache, M.**, Onea, A., Belţa, C., An Implementation of the Controller for the LQ Optimal Problem, *Preprints of the 10th International Conference on Control Systems and Computer Science*, Bucureşti, Vol. I, pg. 83 - 86, (1995).
7. Pănescu, D., Huţanu, C., Pricop, A., **Postolache, M.**, On Expert System Use In Computer Integrated Manufacturing, *Preprints of the 5th International Symposium on Automatic Control and Computer Science - SACCS'95*, Iaşi, Vol. I, pg. 240-245, (1995).
8. Pricop, A., Huţanu, C., Pănescu, D., **Postolache, M.**, A Fuzzy System For The Control of Guided Robots in a Processing Department, *Preprints of the 5th International Symposium on Automatic Control and Computer Science - SACCS'95*, Iaşi, Vol. I, pg. 257-262, (1995).
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11. **Postolache, M.**, Huţanu, C., Siriteanu, C., A Multimaster Data Communication Protocol for Low-Cost Industrial Control Networks, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol. I, Iaşi, pp. 101-106 (1998).
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13. Huţanu, C., Movileanu, G., Gură, A., **Postolache, M.**, A PC Based Controller/Monitor for LonWorks Networks, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol. I, Iaşi, pp. 89-94 (1998).
14. Pricop, A., Huţanu, C., Pănescu, D., **Postolache, M.**, Fuzzy Decision–Making System Applied to Traffic Control, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol. I, Iaşi, pp. 95-100 (1998).
15. Siriteanu, C., Huţanu, C., **Postolache, M.**, Adaptive Control Algorithm Implementation on Microcontroller Based Systems, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol.I, Iaşi, pp. 107-112 (1998).
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17. Resmeriţă, Şt., Pănescu, D., Huţanu, C., **Postolache, M.**, A Microcontroller versus Microprocessor Architecture for a Stepper Motor Based Robot, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol. I, Iaşi, pp.140- 143 (1998).
18. Pricop, A., Huţanu, C., Pănescu, D., **Postolache, M.**, Fuzzy Automata Design Toolbox, *Proceedings of the 6th International Symposium on Automatic Control and Computer Science - SACCS'98*, vol. I, Iaşi, pp.220-225 (1998).
19. **Postolache., M.**, Huţanu, C., Boboc, L., Real-Time Communications in Distributed Control Systems, *Proc. of the 7th International Symposium on Automatic Control and Computer Science – SACCS2001*, (CD-ROM), Iaşi, (2001).
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21. Haba, C.G., Huţanu, C., **Postolache, M.**, A New Method For The Decomposition Of Complex Automata, *Proc. of the 7th International Symposium on Automatic Control and Computer Science – SACCS2001*, (CD-ROM), Iaşi, (2001).
22. **Postolache, M.**, Huţanu, C., New Media Access Control Protocols for Low Cost Industrial Control Networks, *Proc. of the 7th International Symposium on Automatic Control and Computer Science – SACCS2004*, (CD-ROM), Iaşi, (2004).
23. **Postolache, M.**, *A Framework for Low-Cost Reliable Communication Protocols Testing and Development*, Lucrările Conferinţei Internaţionale Interdisciplinare "Creativitatea în ştiinţă şi tehnică" (CDROM), Bucureşti (2005), ISBN 973-663-165-6.
24. **Postolache, M.**, Postolache, M., Picoş, S., Dorohoi, D.O., *Partially Ordered Systems of Particles Studied by Optical and Spectral Means*, Lucrările Conferinţei Internaţionale Interdisciplinare "Creativitatea în ştiinţă şi tehnică" (CDROM), Bucureşti (2005), ISBN 973-663-165-6.

25. **M. Postolache**, M. Postolache, D. Dorohoi *„Lyotropic liquid crystal in external electrostatic fields"*, CNFA 2006, Gh. Asachi Technical university of Iasi, abstract, pp.186.
26. **M. Postolache**, M. Postolache, D. Dorohoi, „Simularea spectrului canelat al unui cristal lichid liotrop în vederea evidenţierii acţiunii câmpului electrostatic extern asupra parametrului de ordonare", Zilele Academice Ieşene, MACRO Iaşi 2006, abstract, pp.43.
27. **M. Postolache**, C. Hălăucă, C. Lazăr, "SCADA Systems for Water and Wastewater Networks", Proc. of the 9th International Symposium on Automatic Control and Computer Science – SACCS2007, Iaşi, pp.364-368, ISSN 1843-7257
28. **Postolache, M.**, "CAN Network Analyzer Tool for Distributed Applications Development", Proc. of the 9th International Symposium on Automatic Control and Computer Science – SACCS2007, Iaşi, pp.385-390, ISSN 1843-7257
29. Harna, I., Marfă, Șt., **Postolache, M.,** "Supervisory Control and Data Acquisition System Implementation for Optimizing the Environment Conditions in a Mushroom Culture", Proc. of the 9th International Symposium on Automatic Control and Computer Science – SACCS2007, Iaşi, pp.379-374, ISSN 1843-7257
30. Postolache, M., Obreja Ursu, L., **Postolache, M.,** Dorohoi, D.O, A Study Of The Stretching Effect On The Anisotropy Of Polymer Foils, A IV-a Conferinţă Naţională de Fizică Aplicată, Iaşi, România, 19-20 noiembrie 2010
31. Postolache, M, **Postolache, M.,** Dorohoi, D.O, Characterization of the solvation spheres of some dipolar spectrally active molecules in binary solvents, National Conference of Applied Physics, 8 - 9 Decembrie 2008, Iaşi , Romania, CNFA 2008, „Gh.Asachi", Tehnical University of Iasi
32. Postolache, M, **Postolache, M.,** Dorohoi, D.O, Spectral Composition Of Light Emerging From An Anisotropic Layer Between Crossed Polarizers, Inverstigated Using 3-D Representation In Matlab, DTMM2010, Iasi, 14-16 May 2010

J. Invenţii.

K. Contracte de cercetare/granturi.

1. DIGITAL INNOVATION ZONE EDIH-MANUFACTURING& SMART HEALTH for better business, life and health in the North East Romania region", SMIS 16182, Responsabil proiect conf. dr. ing. Simona Caraiman

2. Dezvoltarea unui sistem logistic inteligent utilizând roboți mobili omnidirecționali autonomi, Proiect de transfer la operatorul economic (PNCDI / agent economic), nr. 19/2020, Responsabil proiect conf. dr. ing. Constantin Cătălin Dosoftei

3. Oferte educaționale noi și flexibile în învățământul terțiar universitar și non-universitar tehnic conforme cu cerințele pieței muncii în schimbare, POCU MySMIS 122333, 2019-2022, responsabil proiect Partener 1 TUIași.
4. Reţea de centre pentru dezvoltarea programelor de studii cu rute flexibile şi a unor instrumente didactice la specializarea de licenţă şi masterat, din domeniul Ingineria Sistemelor, POSDRU/86/1.2/S/63806, 2010-2013, partener principal Universitatea Tehnică de Construcții din București, responsabil proiect Partener 4 TUIași prof.dr.ing. Mihail Voicu.

5. Creşterea competitivităţii intreprinderilor prin perfecţionarea şi specializarea resurselor umane în domeniul noilor tehnologii, într-o societate bazată pe cunoaştere şi pentru o dezvoltare durabilă – ComHighTech în Programul Operaţional Sectorial Dezvoltarea Resurselor Umane (POSDRU) 2007-2013, director proiect: Prof. dr. ing. Ioan Dumitrache, Centrul Regional de Consultanţă şi Pregătire a Resurselor Umane Iaşi, (CRCPRU-Is), director centru prof.dr.ing. Corneliu Lazăr.

6. Tehnologii informatice de timp real pentru sistemele incorporate care asigură controlul lantului de transmisie a puterii la autovehicule (SICONA) în Programul 4 – Parteneriate în domeniile prioritare, contract CNMP nr. 12100/01.10.2008, 2008-2011, director proiect prof.dr.ing. Corneliu Lazăr.

7. Platforme robot - vedere artificială autonome, inteligente de calificare, sortare/prelucrare/ambalare si inspectie de calitate a produselor cu arhitectura de control holonic, orientata pe servicii, bazata pe trasaturi (SOFHICOR), Proiect de tip Parteneriate in domenii prioritare PNII, Contract Nr. 11-042/18.09.2007, 2007 – 2010, responsabil UTI prof.dr.ing. Doru Adrian Pănescu.

8. Platformă GIS integrată pentru analiza, proiectarea, simularea şi optimizarea funcţionării reţelelor de alimentare cu apă şi de canalizare (GISHIDRO) - contract nr. 63 (CEEX-II 03) / 2006-2008 (director program prof.dr. ing. Dan Gâlea).

9. Metode avansate de control pentru eficientizarea producerii şi utilizării energiei (CEEX-I 05) 2005-2007 (director program prof.dr.ing. Corneliu Boţan)

10. Realizarea unui sistem informaţional pentru planificarea şi controlul sistemelor multi-robot, grant anual CNCSIS, cod CNCSIS 540/2004 (director program prof.dr. ing. Doru Pănescu).

11. Tehnici avansate aplicate în controlul sistemelor de acţionare electrice - Algoritmi şi programe referitoare la aplicarea unor tehnici avansate pentru conducerea sistemelor de acţionare electrice, Contract nr. 3357/2003, T9, cod CNCSIS 303 (director program prof.dr. ing. Corneliu Boţan).

12. Tehnici avansate aplicate în controlul sistemelor de acţionare electrică, Contract nr. 33479/2002, T19, cod CNCSIS 402 (director program prof.dr. ing. Corneliu Boţan)

13. Tehnici avansate aplicate în controlul sistemelor de acţionare electrică, Contract nr. 35259/2001, T49, cod CNCSIS 221 (director program prof.dr. ing. Corneliu Boţan)

14. Sinteza circuitelor numerice secvenţiale prin metode implicite folosind diagrame de decizie binară - proiect de cercetare tip T, cod ANSTI nr. 39/2000, desfăşurat în 2000-2001 (director program şef lucr.dr. ing. Cristian Gyozo Haba)

15. Laborator integrat pentru studiul, proiectarea şi execuţia structurilor numerice de comandă a proceselor tehnice, Proiect major universitar CNFIS, Contract nr. 45190/18.12.2000, cod CNFIS 4 MC 20058, 2000

16. Sisteme evoluate de conducere a acţionărilor electrice, Contract nr. 3428/1999, T29, cod CNCSIS 244 (director program prof.dr. ing. Corneliu Boţan)

17. Utilizarea sistemelor de vedere artificială în conducerea roboţilor industriali – Metode de analiză a imaginilor 3D conţinând obiecte poliedrice, grant anual CNCSU, contract 37/1998, cod CNCSU 545/1998 (director program prof.dr. ing. Mihail Voicu)

18. Sistem integrat de laboratoare pentru studiul domeniului fabricaţiei asistate de calculator – grant CNFIS, proiect de iniţiere de program, cod CNFIS 1-PU-2-0006 (director program prof. dr. ing. Mihail Voicu)

19. Procesoare numerice de semnal în controlul automat – proiect CNFIS, Contract 12816/1998 (director program prof.dr.ing. Corneliu Huțanu)
20. Sisteme evoluate de conducere a acţionărilor electrice – Metode de estimare a stărilor, parametrilor şi cuplurilor în sistemele de acţionare electrică, Contr. 37/1998 – T59, Grant 458/1998 (director program prof.dr. ing. Corneliu Boţan)
21. Sisteme evoluate de conducere a acţionărilor electrice, - Algoritmi pentru conducerea optimală şi adaptivă a sistemelor de acţionare electrică, Contr. 7002/1997 – T1, Grant 139/1997 (director program prof.dr. ing. Corneliu Boţan)
22. Conducerea sistemelor de tip descriptor –Algoritmi şi programe pentru sinteza sistemelor de tip descriptor, Contr. 7002/1997, T2, Grant 140/1997 (director program prof.dr. ing. Corneliu Boţan)
23. Conducerea sistemelor de tip descriptor – Sinteza şi optimizarea sistemelor de tip descriptor, Contr. 5002/1996, Grant 554/1996 (director program prof.dr. ing. Corneliu Boţan)
24. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică – Elaborarea şi verificarea de programe pentru conducerea sistemelor de acţionare electrică, Contr. 5002/1996, Grant 555/1996 (director program prof.dr. ing. Corneliu Boţan)
25. Conducerea sistemelor de tip descriptor – Modelarea şi analiza sistemelor de tip descriptor, Contr. 4002/1995 – B5, Grant 497/1995 (director program prof.dr. ing. Corneliu Boţan)
26. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică – Metode de conducere a sistemelor de acţionare electrică, Contr. 4002/1995 – A15, Grant 532/1995 (director program prof.dr. ing. Corneliu Boţan)
27. Algoritmi pentru conducerea optimală a sistemelor de acţionare electrică – Noi proceduri de optimizare a sistemelor de acţionare electrică, contract 3002/1994 – C2 (director program prof.dr. ing. Corneliu Boţan)
28. Algoritmi şi programe pentru conducerea optimală din punct de vedere energetic a proceselor tehnologice, contr.3002/1994-A3 (director program prof.dr. ing. Corneliu Boţan).

Data: 1.10.2025

Conf.dr.ing. Mihai Postolache
Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Mirea Letiţia

A. Teza de doctorat.

Tehnici ale inteligenţe artificiale aplicate la diagnoza proceselor industriale, prof.dr.ing. M. Voicu, 2002

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

Marcu, T., L. Mirea, Metode şi tehnici de calcul numeric, Editura Politehnium Iaşi, pp. 352 (33 rânduri/ pag.), ISBN 973-621-138-X, 2006

Marcu, T., L. Mirea, Diagnoza anomaliilor proceselor tehnice, Editura "Gh.Asachi" Iaşi, pp. 253 (40 rânduri/ pag.), ISBN 973-8292-84-0, 2003

Kloetzer, M., L.Mirea, O. Păstrăvanu, Sisteme liniare continue, Editura Politehnium Iaşi, pp. 340, ISBN 978-973-621-422-6

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

Marcu, T., L. Mirea, Programarea aplicaţiilor de calcul numeric – curs, Universitatea Tehnică "Gh. Asachi" Iaşi - tipar rotaprint, pp. 210 (37 rânduri/ pag.), 1996

Marcu, T., L. Mirea, Programarea aplicaţiilor de calcul numeric – îndrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi - tipar rotaprint, pp. 125 (39 rânduri/ pag.), 1998

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

Mirea, L., Tehnici avansate pentru diagnoza anomaliilor, Universitatea Tehnică "Gh. Asachi" Iaşi, http://www.ac.tuiasi.ro/ro/library/cursDIAGNOZAweb/main_web.htm, pp. 200 (30 rânduri/ pag.), 2005

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F1 Lucrări indexate ISI

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Alexandru Cohal, Letiția Mirea, "Fault Detection and Isolation of a Wind Turbine", International Journal of Control Engineering and Applied Informatics, vol.9, no. 3,2017, pp 107 – 118

F2 Lucrări indexate BDI

Mirea, L., „Fault diagnosis using dynamic co-active neuro-fuzzy systems", Memoriile Secţiilor Ştiinţifice ale Academiei Române, seria IV, tom XXX, pp. 39-53, 2007 (aparuta in 2008)

Mirea, L., L. Ferariu, "Neuro-fuzzy systems with interconnected fuzzy rules applied to fault diagnosis", Memoriile Secţiilor Stiintifice ale Academiei Române, T. XXVIII, pp. 267-280, 2006

Ferariu, L., L. Mirea, "Design of feedforward artificial neural networks with hibrid hidden layer", Memoriile Secţiilor Stiintifice ale Academiei Române, T. XXVIII, pp. 281-291, 2006

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Mirea, L., T. Marcu, Development of dynamic radial basis function artificial networks, Buletinul Institutului Politehnic din Iaşi, tomul XLV (IL), fasc.1 – 4, pp. 5 – 15, 1999, ISSN 1220-2169

G. Lucrări ştiinţifice publicate în reviste din străinătate.

Marcu, T., L. Mirea, P.M. Frank, Development of dynamic neural networks with application to observer-based fault detection and isolation, International Journal of Applied Mathematics and Computer Science, vol.9, no.3, pp. 547 – 570, ISSN 0867-857X, 1999

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I1 Lucrări indexate ISI Web of Science

Ovidiu Păucă, Letiția Mirea, " Comparative Study on Pitch Angle Control of an Aircraft Using Neural Networks", 2017 21st International Conference on System Theory, Control and Computing (ICSTCC), October 19-21, Sinaia, Romania

Mirea, L., R.J.Patton, Recurrent wavelet neural network applied to fault diagnosis, Mediteranean Control Conference MED'08, , CD-ROM Proceedings, 2008, pp. 1774-1779, DOI 10.1109/MED.2008.4602243

Marcu, T., L. Mirea, M. Mensler, Neural approaches to observer-based diagnosis of faults in dynamic systems, 11th IFAC Symposium on System Identification

Marcu, T., L. Mirea, P. M. Frank, Neural observer schemes for robust detection and isolation of process faults, UKACC/IEE International Conference on Control CONTROL'98, Swansea, UK, vol.2, pp. 958 – 963, 1 – 4 September 1998, ISBN 0-85296-708-X

Marcu, T., L. Mirea, A. Klósz, A neural network approach to robust model-based diagnosis of faults in a three-tank system, IEEE International Symposium on Computer-Aided Control System Design CACSD'96, Dearborn, USA, pp. 111 – 116, 15 – 18 September 1996, ISBN 0-7803-3032-3

I2 Lucrări indexate BDI

Păucă, G.-S., L. Mirea, C.-F. Căruntu, „Adaptive MPC with Online Weight Tuning using Neural Networks", Int. Conf. on Control, Automation and Diagnosis, ICCAD 2025, Barcelona, Spain

Costîn I., L. Mirea, „Sign Language Detection using Deep Learning", ICSTCC 2025, Cluj-Napoca, România

Ciobanu, T., O. Chioaru, L. Mirea, C.F. Căruntu, „Underbrake Fault Detection in Automotive Systems Using Advanced Neural Network Architectures", ICSTCC 2025, Cluj-Napoca, România

D. Gheorghita, I. Vintu, L.Mirea, C. Braescu, "Quadcopter Control System. Modelling and Implementation", ICSTCC 2015, Fundata, Romania

Mirea, L., Dynamic Multivariate B-spline Neural Network Design Using Orthogonal Least Squares Algorithm for Non-linear System Identification, 18th Int. Conf. On System Theory, Control and Computing, Sinaia, Romania, October 17-19, 2014, ISBN 978-1-4799-4602-0

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Mirea, L., Fault Detection and Isolation Using Dynamic Co-Active Neuro-Fuzzy Systems, 7th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS'2009, Barcelona, Spain, CD-ROM Proceedings, 2009

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Mirea, L., R.J. Patton, A new dynamic neuro-fuzzy system applied to fault diagnosis of an evaporation station, 6th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS'2006, Beijing, P.R. China, CD-ROM Proceedings, pp. 253 – 258, August 30 – September 1, 2006, ISBN

Mirea, L., L. Ferariu, Component fault diagnosis using co-active neuro-fuzzy systems, Int. Symposium SINTES 12, 20-22 october 2005, Craiova, Romania, CD-ROM Proceedings, ISBN 973-742-148-5

Mirea, L., R.J.Patton, Fault Diagnosis using Neuro-Fuzzy Systems with Local Recurrent Structure, 16th IFAC World Congress Praha'2005, Prague, Czech Republic, 4 - 8 July, 2005, ISBN: 0-08-045108-X

Mirea, L., R. J. Patton, Fault Diagnosis of a Three-Tank System Using Dynamic Neuro-Fuzzy Systems, 5th Int. Conf. on Recent Advances in Soft Computing, RASC2004, Nottingham, UK, CD-ROM Proceedings, pp. 171 – 176, 16-18 December 2004, ISBN 1-84233-110-8

Mirea, L., T. Marcu, System identification using functional-link neural networks with dynamic structure, 15th IFAC Congress b'02, Barcelona, Spain, CD-ROM Proceedings, 21-26 July 2002, ISBN 0-08-044221-8

Marcu, T., L. Mirea, P. M. Frank, H.D. Kochs, System identification and fault diagnosis using dynamic functional-link neural networks, European Control Conference ECC'01, Porto, Portugal, CD-ROM Proceedings, pp. 1618 – 1623, 4-7 sept.2001, ISBN 972-752-047-2

Marcu, T., L. Mirea, L. Ferariu, P. M. Frank, Miscellaneous neural networks applied to fault detection and isolation of an evaporation station, 4th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS'2000, Budapest, Hungary, vol.1, pp. 352 – 356, 16 – 20 June 2000, ISBN 0-08-043250-6

Ferariu, L., T. Marcu, L. Mirea, Investigations on genetic evolving of artificial networks with application to system identification, EC-INCO Copernicus Workshop on Integration of Quantitative and Qualitative Fault Diagnosis Methods within the Framework of Industrial Application, Kazimierz, Poland, pp. 34-41, 5 – 8 November 1998

Marcu, T., L. Mirea, P. M. Frank, Neural observer schemes for robust detection and isolation of process faults, UKACC/IEE International Conference on Control CONTROL'98, Swansea, UK, vol.2, pp. 958 – 963, 1 – 4 September 1998, ISBN 0-85296-708-X

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Marcu, T., L. Mirea, M. Mensler, Neural approaches to observer-based diagnosis of faults in dynamic systems, 11th IFAC Symposium on System Identification SYSID'97, Kitakyushu, Fukuoka, Japan, vol.3, pp. 1179 – 1184, 8 – 11 July 1997, ISBN 0-08-042592-5

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Marcu, T., L. Mirea, A. Rusu, *Fault diagnosis of a three-tank system using artificial neural networks*, 5th Symposium on Automatic Control and Computer Science, Iaşi, Romania, vol.1, pp. 182 – 187, 26-27 October 1995

J. Invenţii.

K. Contracte de cercetare/granturi.

EC FP4 INCO Copernicus Integration of Qualitative and Quantitative Methods for Fault Diagnosis in the Framework of Industrial Application IQ2FD – Sensor and actuator fault diagnosis of the evaporation station from the Lublin sugar factory based on dynamic neural networks and neuro-genetic systems, cod contract ERBC-CT-97-0714, 1997 – 1999, etapa II - 1998-1999, valoare 10,150 ECU = 166,510,750 lei (curs BNR 1 iulie 1998: 1 ECU=16,405 lei), medie contract 1999 =26,561,871 lei (recalculată faţă de media contractelor A din 2000, pe baza cursului mediu al dolarului afişat de BNR: curs mediu 1999: 1USD= 15,332 lei, curs mediu 2000: 1 USD =21,692 lei), responsabil

EC FP4 INCO Copernicus Integration of Qualitative and Quantitative Methods for Fault Diagnosis in the Framework of Industrial Application IQ2FD – Development of new dynamic neural networks and neuro-genetic systems, cod contract ERBC-CT-97-0714, 1997 – 1999, etapa I - 1997-1998, valoare 10,150 ECU =96,181,400 lei (curs BNR 1 iulie 1998: 1 ECU = 9,476 lei), medie contract 1998 = 15,373,463 lei (recalculată faţă de media contractelor A din 2000, pe baza cursului mediu al ECU afişat de BNR: curs mediu 1998: 1USD= 8,875 lei, curs mediu 2000: 1 USD =21,692 lei)

Diagnoza anomaliilor proceselor utilizând sisteme neuro-fuzzy, cod CNCSIS 520, tema 40/ 2005, valoare 250,000,000 lei – director

Tehnici avansate bazate pe vedere artificiala pentru conducerea roboţilor, Contract nr. A1/GR 164/19.05.2006, Tema nr. 13, cod CNCSIS 232/2006 - membru

Membru grant Contract CEEX – MENER 603 / 03.10.2005, METODE AVANSATE DE CONTROL PENTRU EFICIENTIZAREA PRODUCERII SI UTILIZARII ENERGIEI - membru

Membru grant CNCSIS Contract nr. 194 din data 07.06.2006 de tip A-Consortiu, REŢELE DE DISTRIBUŢIE DE CURENT CONTINUU PENTRU APLICAŢII INDUSTRIALE – Dcnet - membru

Membru contract cu S.C. CET Iaşi nr. 1475/ 29.07.2005 „Proiectarea şi implementarea unor structuri de reglare pentru parametrii tehnologici debit, presiune gaz metan şi nivel tambur de la cazanele 420 t/h cu combustibil hidrocarburi" - membru

Acordarea neuro-predictiva a algoritmilor de conducere - Testarea prin simulare pe modelul neural al Cazanului de abur nr. 2 S.C. CET IASI S.A, contract 33371/2004, cod CNCSIS – 763, tema 60/2004 - membru

Acordarea neuro-predictiva a algoritmilor de conducere - Testarea in timp real pe macheta de laborator PROCON., contract 33371/2003, cod CNCSIS – 763, tema 60/2003 - membru

Modernizarea învăţământului de scurtă durată de la Facultatea de Automatică şi Calculatoare a Universităţii Tehnice Gh.Asachi din Iaşi, grant CNFIS – Banca Mondială cod 4-MC-2-0127, 2001 – 2002 - membru

Laborator de instruire în domeniul conducerii asistate de calculator a proceselor – LICAP - Utilizarea facilităţilor LICAP în activitatea didactică şi de cercetare, grant CNFIS – Banca Mondială cod 2MU-103, contract 12819/28.09.1998 (1998 - 2002) - membru

Sistem integrat de laboratoare pentru studiul domeniului fabricatiei asistate de calculator – Dezvoltarea sistemului integrat de laboratoare pentru studiul fabricaţiei asistate de calculator, cod CNFIS 1 PU 2 0006 - membru

Analiza si implementarea unor metode avansate de conducere a fabricatiei, contract nr. 37089/2000, Tema nr. 33, etapa I, cod CNCSIS 942/2000 - membru

Sistem integrat de laboratoare pentru studiul domeniului fabricatiei asistate de calculator – Iniţierea sistemului integrat de laboratoare pentru studiul fabricaţiei asistate de calculator, cod CNFIS 1 PU 2 0006, etapa I, 2000-2001 din contract nr. 41861/4.11.1999 - membru

L. Premii, distincţii.

M. Alte realizări semnificative

Membru în organizaţii profesionale: membru SRAIT, membru IFAC SAFEPROCESS Technical Committee

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice: recenzor reviste de specialitate (IEEE Trans. on Industrial Electronics, CEAI, Int. Journal of Adaptive Control and Signal Processing, Int. Journ, of Appl. Math. and Comp.Sci., MDPI – Sensors, Applied Sciences, Aerospace), recenzor conferinţe internaţionale din domeniul automaticii, informaticii aplicate şi sistemelor inteligente (ECC,

ICSTCC, SYSTOL, IEEE CDC, Mediterranean Conference on Control and Automation, IFAC Symposium on Analysis, Design and Evaluation of Human-Machine Systems)

Data: 29 septembrie 2025

Numele și prenumele: Mirea Letiția

Semnătura

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Ferariu Lavinia Eugenia

A. Teza de doctorat.

A1 L. Ferariu, *Algoritmi evolutivi în automatică*, domeniul automatică, conducător ştiinţific prof. dr. ing. M. Voicu,UniversitateaTehnică "Gh. Asachi" Iasi, Facultatea de Automatică şi Calculatoare, 2004.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

B1 L. Ferariu, A. Patelli, *Genetic Programming for System Identification,* Formal and Practical Aspects of Autonomic Computing and Networking: Specification, Development and Verification, 2011, Ed. IGI Global, pp. 135-168, ISBN13: 9781609608453

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

C1 L. Ferariu, *Lecture Notes for Hybrid Intelligent Systems*, Conspress, Bucuresti, 116 pp, 2013, ISBN 978-973-100-286-6.

C2 L. Ferariu, *Sisteme inteligente hibride - note de curs*, Conspress, Bucuresti, 117 pp. , 2013, ISBN 978-973-100-264-4

C3 L. Ferariu, *Sisteme neurogenetice*, Editura Politehnium, Iasi, 2010, ISBN 978-973-621-313-7, 220 pag

C4 L. Ferariu, *Algoritmi evolutivi în identificarea şi conducerea sistemelor*, Ed. Politehnium, Iaşi, 2005, 204 pp, ISBN 973-621-112-6

C5 M. Voicu, L. Ferariu, O. Păstrăvanu, F. Schonberger, *Introducere in automatică – Culegere de probleme*, Ed. MATRIX ROM, Bucureşti, 1999, 214 pp, ISBN 973 – 685 –135 – 4

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

E1 L. Ferariu, *Programarea aplicaţiilor de timp real*, note de curs, patr.ac.tuiasi.ro, edu.tuiasi.ro

E2 L. Ferariu, *Logică computaţională*, note de curs edu.tuiasi.ro

E3 L. Ferariu, *Logică computaţională*, referate de laborator, edu.tuiasi.ro.

E4 L. Ferariu, *Managementul proiectelor*, note de curs, edu.tuiasi.ro

E5 L. Ferariu, *Project Management*, note de curs, edu.tuiasi.ro

E6 L. Ferariu, *Ingineria programării*, note de curs, edu.tuiasi.ro

E7 L. Ferariu, *Sisteme embedded inteligente,* note de curs, www.comhightech.ro

E8 L. Ferariu, *Tehnici de învățare automată*, note de curs, edu.tuiasi.ro

E9 L. Ferariu, *Tehnici de învățare automată*, referate de laborator, edu.tuiasi.ro

E10 L. Ferariu, *Machine Learning*, note de curs, edu.tuiasi.ro

E11 L. Ferariu, *Machine Learning*, referate de laborator, edu.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F1 F. C. Braescu, L. Ferariu, C. Lazar, Multi-domain CAN Gateway with Monitoring Capabilities, Journal of Control Engineering and Applied Informatics, ISSN 1454-8658,16(2), 49-57, 2014 (ISI)

F2 A. Patelli, L. Ferariu, *Elite Based Multiobjective Genetic Programming in Nonlinear Systems Identification*, Advances in Electrical and Computer Engineering, vol 10 (1), 2010, 94-99, ISSN 1582-7445, e-ISSN 1844-7600 (ISI)

F3 C. Petrescu, L. Ferariu, R. Olaru, *Optimization of ferrofluid actuator using evolutionary algorithms and finite element method*, Revue Roumaine des Sciences Techniques, serie Electrotechnique et Energetique, tom 54, nr.1, 2009, pp. 77-86, ISBN 0035-4066.(ISI)

F4 L. Ferariu, G. Galai, Emebdded RBF NN Using Gradient/Based Training with Multiple Adaptive Learning Rates, Buletinul Institutului Politehnic din Iasi, Sectia Automatica si Calculatoare, ISSN 1220 - 2169, fasc. 1, LXI (LXV), 1-18, 2016

F5 L. Ferariu, E. Boghian, Real-time object detection based on dual stochastic backgrounds with adaptive learning rates,Buletinul Institutului Politehnic din Iasi, Sectia Automatica si Calculatoare, ISSN 1220 - 2169,fasc. 1,LXI (LXV), 1-18, 2015

F6 C. Agrigoroaie, L. Ferariu, C. Braescu, Reflective Online reconfiguration of RealTime Applications Having Tasks With Static Priorities, Buletinul Institutului Politehnic din Iaşi, Tome LVIII (LXII), Fasc. 1, 2012, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, pp. 9-26, ISSN 1220 – 2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Google Scholars, Zentralblatt)

F7 C. Cîmpanu, L. Ferariu, Survey of Clustering Algorithms, Buletinul Institutului Politehnic din Iasi,Tome LVIII(LXII), Fasc. 3, pp. 23 - 42 , 2012 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Google Scholars, Zentralblatt)

F8 B. Burlacu, L. Ferariu, Graph Genetic Prgramming with Heuritics Based Crossover, Annals of the University of Craiova, Romania, Series: AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS, ISSN: 1841-0626, Volume 8 (35), 7-13, 2011 (B+: Google Scholars)

F9 C. Braescu, L. Ferariu, Real-time Constraints Monitoring for OSEK applications, Buletinul Institutului Politehnic din Iaşi, Tome LVII (LX), Fasc. 1, 2011, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, ISSN 1220 – 2169, http://www.ace.tuiasi.ro/index.php?page=678 (B+: Google Scholars, Zentralblatt)

F10 L. Ferariu, B. Burlacu, Evolutionary Neural Networks with Heterogenous Hidden Neurons, Scientific Bulletin of "Politehnica" University of Timisoara, Romania, Transactions on Automatic Control and Computer Science, ISSN 1224-600X, vol. 55 (69), no. 4, pp. 239- 246, 2010, http://www.ace.tuiasi.ro/index.php?page=678 (B+: Google Scholars)

F11 B. Burlacu, L. Ferariu, The Design of Hybrid Neural Networks by Means of Genetic Programming, Buletinul Institutului Politehnic din Iaşi, Tome LVI (LX), Fasc. 1, 2010, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, ISSN 1220 – 2169, pp. 9 – 22 http://www.ace.tuiasi.ro/index.php?page=678 (Google Scholars)

F12	A. Pohoaţă, L. Ferariu , Image Segmentation Based on Clustering Techniques, Buletinul Institutului Politehnic din Iaşi, Tome LVI (LX), Fasc. 1, 2010, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, ISSN 1220 – 2169, pp. 23 – 34, http://www.ace.tuiasi.ro/index.php?page=678 (B+: Google Scholars, Zentralblatt)
F13	A. Patelli, L. Ferariu, Regressor Encapsulation using Fuzzy Control in Evolving Nonlinear Models, Annals of the University of Craiova, Romania, Series: AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS , ISSN: 1841-0626, Volume 7 (34), no. 2, pp. 26-32, 2010 (B+: Google Scholars)
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F15	L. Ferariu, A. Patelli, Multiobjective Genetic Programming with Insular Evolution and Adaptive Migration, Scientific Bulletin of "Politehnica" University of Timisoara, Romania, Transactions on Automatic Control and Computer Science, 4, 155-162, ISSN 1224-600X, 2009 (B+: Google Scholars)
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F21	L. Ferariu, L. Mirea, Matlab Toolbox Based On Evolutionary Strategies, Buletinul Institutului Politehnic Iaşi, Romania, 2006, tomul LII (LVI), fasc.1 – 4, pp.19-30, ISSN 1220 2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)
F22	L. Mirea, L. Ferariu, Neurofuzzy Systems With Interconnected Fuzzy Rules Applied To Fault Diagnosis, Revista Memoriile Sectiilor Stiintifice ale AR, Editura Academiei Romane, 2005, ISSN 11224 1407 http://mss.academiaromana-is.ro/abstracting_indexing.html (B+: Zentralblatt)
F23	L. Ferariu, L. Mirea, Design of Feedforword Artificial Neural Networks With Hybrid Hidden Layer, Memoriile Sectiilor Stiintifice ale AR, Editura Academiei Romane, 2005, http://mss.academiaromana-is.ro/abstracting_indexing.html (B+: Zentralblatt)
F24	L. Ferariu, C. Lefter, Evolutionary Methods for Constrained Nonlinear Optimisations, Revista Memoriile Sectiilor Stiintifice ale AR, T XXVI/2003, pp. 241-252, ISSN 11224 1407, Editura Academiei Romane, prezentată la Symposium on Intelligent Systems and Applications, SIA 2003, September 17-19, Iaşi, Romania, CDROM, http://mss.academiaromana-is.ro/abstracting_indexing.html (Zentralblatt)
F25	L. Ferariu, Evolutionary Dynamic General Neural Networks Applied To System Identification, Revista Memoriile Sectiilor Stiintifice ale AR, T XXV/2002, pp. 303 – 316, Editura Academiei Romane, ISSN 11224 1407, prezentată la European Conference on Intelligent Systems and Technologies ECIT2002, Symposium on Intelligent Software and Control Systems SISCS2002,

Iaşi, Romania, 2002, http://mss.academiaromana-is.ro/abstracting_indexing.html (B+: Zentralblatt)

F26 L. Ferariu, H. N. Teodorescu, L. Fira, *Adaptation Schemes for A Neurofuzzy Predictor,* Proc. of Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information science, Ed. Academiei Romane, 2005, vol. 6, no. 2, pp. 167-176 (B+: Google Scholars)

F27 I. Bejenar, L. Ferariu, C. Pascal, C.-F. Caruntu, Aggregation Methods Based on Quality Model Assessment for Federated Learning Applications: Overview and Comparative Analysis, Mathematics, 11 (22), 2023.

F28 A.-P. Botezatu, L. Ferariu, A. Burlacu, Enhancing Visual Feedback Control Through Early Fusion Deep Learning, Entropy, 25 (10), 2023, 1-26.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

H1 L. Mirea, L. Ferariu, *Component Falut Diagnosis Using Co-active Neurofuzzy Systems*, Annals of University of Craiova, Series Automation, Computers, Electronics and Mechatronics, vol. 2(29), no. 1, ISSN: 1841-0626, 2005, presented at 12th International Symposium on System Theory, Automation, Robotics, Computers, Informatics, Electronics and Instrumentation, 20-22 October 2005, Craiova, Romania (B+: Google Scholars)

H2 L. Ferariu, L. Mirea, *Evolutionary Design of Static Hybrid Neural Architectures*, Buletinul Institutului Politehnic Iaşi, Romania, 2004, tomul L (LIV), fasc.1 – 4, pp. 17–24, ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H3 L. Ferariu, L. Mirea, *System Frequency Analysis Based on Quaternion Multilayer Perceptron Neural Networks*, Buletinul Institutului Politehnic Iaşi, Romania, 2004, tomul L (LIV), fasc.1 – 4, pp.7 -15, ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H4 L. Mirea, L. Ferariu, *Fault Diagnosis of a Three-Tank System using Wavelet Neural Networks*, Buletinul Institutului Politehnic Iaşi, Romania, 2004, tomul L (LIV), fasc.1 – 4, pp 25 – 34, ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H5 L. Mirea, L. Ferariu, *Fault Diagnosis of an Electro-pneumatic Valve Using Neuro-Fuzzy Systems with recurrent connections*, Buletinul Institutului Politehnic Iaşi, Romania, 2004, tomul L (LIV), fasc.1 – 4, pp. 35 – 44, , ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H6 L. Ferariu, L. Mirea, *Evolutionary State Feedback Controller,* Buletinul Institutului Politehnic Iaşi, Romania, 2003, tomul XLIX (LIII), fasc.1 – 4, pp. 45 – 54, ISSN 1220-2169. http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H7 L. Mirea, L. Ferariu, *Fault Diagnosis of a Three – Tank System Using Neuro-Fuzzy Systems with Local Recurrent Structure*, Buletinul Institutului Politehnic Iaşi, Romania, 2003, tomul XLIX (LIII), fasc.1 – 4, pp. 35 – 44, ISSN 1220-2169, http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H8 L. Ferariu, T. Marcu, *Evolutionary Design of Multilayer Perceptrons with Application to System Identification*, Buletinul Institutului Politehnic Iaşi, Romania, 2002, tomul XLVIII (LII), fasc. 1-4, pp. 53 – 62, ISSN 1220-2169, prezentată la 7th International Symposium on Automatic Control and Computer Science, Iaşi, 2001, CRDOM http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H9 L. Ferariu, *Genetic Predictive Controller*, Buletinul Institutului Politehnic din Iaşi, 2000, tomul XLVI (L), fasc.1 – 4, pp. 53 – 60, ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

H10 O. Ferariu, L. Ferariu, *On Knight's our Problem*, Buletinul Institutului Politehnic din Iaşi, 2000, tomul XLVI (L), fasc.1 – 4, pp. 25 – 33, ISSN 1220-2169 http://www.ace.tuiasi.ro/index.php?page=678 (B+: Zentralblatt)

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I1 C. Cimpanu, L. Ferariu, Tiberius Dumitriu, Florina Ungureanu, Multi-Objective Optimization of Feature Selection Procedure for EEG Signals Classification, IEEE 6th International Conference on E-Health and Bioengineering - EHB 2017, Sinaia, Romania, 2017 (ISI)

I2 L. Ferariu, Using Self - Organising Maps for Pareto - Ranking in Genetic Multiobjective Optimisations, IEEE ICCP Cluj, Romania, 2017 (ISI)

I3 C. Cimpanu, L. Ferariu, Florina Ungureanu, Tiberius Dumitriu, Genetic Feature Selection for Large EEG Data with Commutation between Multiple Classifiers, IEEE 21th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2017 (ISI)

I4 L. Ferariu, Using Achievement Scalarization Function for Adaptive Pareto Ranking,IEEE 20th International Conference on System Theory, Control and Computing, October 2016, Sinaia, Romania (ISI)

I5 L. Ferariu, C. Cimpanu, Adaptive Genetic Pareto Ranking Based on Clustering, 2015 IEEE Conference on Evolving and Adaptive Intelligent Systems, Douai, Franta, 2015 (ISI)

I6 C. Petrescu, L. Ferariu, Multiobjective Optimization of an Induction Heating Device Using Evolutionary Algorithms, 2014 IEEE International Conference on Electrical and Power Engineering, 6-18 October 2014, Iasi, Romania, IEEE Explore, http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6969905&queryText%3DFerariu, DOI: 10.1109/ICEPE.2014.6969905 (IEEExplore, Inspec, Scopus) (ISI)

I7 L. Ferariu, C. Cimpanu, Multi-objective Hybrid Evolutionary Path Planning with Adaptive Pareto Ranking of Variable Length Chromosomes, Proceedings of IEEE International Symposium on Applied Machine Intelligence and Informatics, Herl'any, Slovakia, 2014, IEEE Explore, DOI: 10.1109/SAMI.2014.6822417 (IEEExplore, Inspec, Scopus) (ISI)

I8 C. Petrescu, L. Ferariu, *Multiobjective Design of Transverse Flux Induction Heating Device for Semiconductor Processing*, International Symposium on Advanced Topics in Electrical Engineering, Bucharest, Romania, 2013 (ISI)

I9 C. Cimpanu, L. Ferariu, *Genetic Multiobjective Fitness Assignment Scheme Applied to Robot Path Planning*, IEEE 10th International Conference on Electronics Computers and Computation, 7-9 Nov. 2013, Ankara, Turcia, 2013. (ISI)

I10 L. Ferariu, C. Cimpanu, *Multi-objective Genetic Algorithm With Clustering Based Ranking And Direct Control Of Diversity*, IEEE 17th International Conference On System Theory, Control And Computing, Sinaia, Romania, 11 - 13 Oct. 2013 (ISI)

I11 F. C. Braescu, L. Ferariu, Multi-domain CAN Gateway for Complex Manufacturing Environments, ModTech International Conference - New face of TMCR, 24-26 May 2012, Sinaia, Romania, http://www.modtech.ro/vol4no12012.php (Google Scholars) (ISI)

I12 A. Patelli, L. Ferariu, *Regressor Survival Rate Estimation for Enhanced Crossover Configuration*, Adaptive and Natural Computing Algorithms, Lecture Notes on Computer Science, in press, Springer Berlin/Heidleberg, 2011, presented at International Conference on Adaptive and Natural Computing Algorithms, Slovenia, 2011 (ISI)

I13 F. C. Braescu, C. F. Caruntu, L. Ferariu, C: Lazar, *OSEK Based Embedded Networked Controller Handling Communication Delays*, 2nd Eastern European Regional Conference on the Engineering of Computer Based Systems, Bratislava, 2011, pp. 71-77, IEEE Explore 6037516, (ISI)

I14 A. Patelli, L. Ferariu, *Elitist Multiobjective Nonlinear Systems Identification with Insular Evolution and Diversity Preservation*. Proc. of 2010 IEEE World Congress on Computational Intelligence - Congress on Evolutionary Computation (CEC 2010), Barcelona, Spain, pp. 2076-2081, ISBN 978-1-4244-6910-9, IEEE catalog no. CFP10ICE-DVD (ISI)

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I21 M. Roșca, L. Ferariu, A. Burlacu, Gh. Solcan. Enhanced Diagnosis, System for Feline Diabetes Mellitus. Congress of The European College of Veterinary, Internal Medicine - Companion Animals, 24th Annual Ecvim-Ca Congress Proceedings, online. Mainz, Germany, September 4-6, 2014 (ecvimcongress.org)

I22 F. C. Braescu, L. Ferariu, R. Galca, V. Bordeianu, Ball on plate balancing system for multi-discipline educational purposes, IEEE ICSTCC 2012, Sinaia, Romania, IEEExplore,http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6379247&queryText%3DFerariu, INSPEC Accession Number: 13175138 (IEEExplore, Inspec, Scopus)

I23 L. Ferariu, Burlacu, B., Multiobjective graph genetic programming with encapsulation applied to neural system identification, 15th IEEE International Conference on System, Theory, Control and Computing, ICSTCC 2011, Sinaia, Romania, IEEE Explore art. no. 6085706, INSPEC Accession Number:12390434, (IEEExplore, Inspec, Scopus)

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I25 A. Patelli, L. Ferariu, A regressive schema theory based tool for GP evolved nonlinear models, Proceedings of 17th IEEE International Conference on Automation and Computing, ICAC 2011, Huddersfield, UK, IEEE Explore art. no. 6084927 , pp. 201-206 (IEEExplore, Inspec, Scopus)

I26 L. Ferariu, B. Burlacu, Multiobjective design of evolutionary hybrid neural networks, Proceedings of 2011 17th IEEE International Conference on Automation and Computing, ICAC 2011, Huddersfield, UK, IEEE Explore art. no. 6084926 , pp.195-200 (IEEExplore, Inspec, Scopus)

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J. Inventii.

K. Contracte de cercetare/granturi.

K1 *Natural sense of vision through acoustics and haptics* (Sound of Vision), proiect ORIZONT 2020, nr. 643636, director de proiect V. Manta, etape 2016-2017

K2 Integration of Quantitative and Qualitative Fault Diagnosis Methods IQ²FD, grant internaţional cercetare INCO-COPERNICUS, contract ERBIC-15CT970714. Finanţare Comunitatea Europeană Coordonator Stiinţific pentru Universitatea Tehnică Gh. Asachi Iaşi conf. dr. ing T. Marcu, 1998 - 1999, valoare 20300 ECU – membru în echipa proiectului/ 2 etape: etapa I (1998), etapa II (1999)

K3 *Grid platooning by swarm intelligence*, finanțat de Continental Automotive Romania, 23928/31.10.2018, 11.2018-12.2018, valoare 87722 RON- membru în echipa proiectului 2018-2019, director conf. Dr. ing. C. Caruntu.

K4 ACTIV pe Piata Muncii: Abilitati si Competente Tehnice pentru Integrare si Valorificare pe Piata Muncii (POSDRU:ID12573), coordonator conf. dr. ing. F. Pantelimonescu, 2014-20151102439 RON

K5	Reţea naţională de centre pentru dezvoltarea programelor de studii cu rute flexibile şi a unor instrumente didactice la specializarea de licenţă şi masterat, din domeniul Ingineria Sistemelor (POSDRU/86/1.2/S/63806), director de proiect prof. dr. ing. M. Voicu, 583526 RON,
K6	Cresterea competitivitătii întreprinderilor prin perfectionarea si specializarea resurselor umane în domeniul noilor tehnologii, într-o societate bazată pe cunoaștere și pentru o dezvoltare durabilă (POSDRU ID 53084), director de proiect prof. dr. ing. C.Lazar, 170489.22 RON
K7	Tehnologii informatice de timp real pentru sistemele incorporate care asigura controlul lantului de transmisie a puterii la autovehicule (SICONA), contract 12-100, grant PN II, director de proiect prof. dr. ing. C. Lazar, 2008-2011, valoare 184463 RON – membru în echipa proiectului/3 etape anuale
K8	Platforme robot-vedere artificiala autonome, inteligente de calificare, sortare/prelucrare/ambalare si inspectie de calitate a produselor cu arhitectura de control holonic, orientata pe servicii, bazata pe trasaturi (SOFHICOR), Contract nr. 11-042 din 18.09.2007, grant PNII, directorde proiect prof. dr. ing. T. Borangiu, 2007-2009, valoare 195970 RON – membru în echipa proiectului/ 3 etape anuale
K9	Cercetari privind optimizarea sistemelor electromagnetice in care intervin probleme cuplate cu ajutorul metodei elementelor finite si a algoritmilor genetici, grant CNCSIS tip A, director de proiect prof. dr. ing. C. Petrescu, 2007-2008, valoare 31500 RON – membru în echipa proiectului/ 2 etape anuale.
K10	Metode avansate de control pentru eficientizarea producerii si utilizarii energiei, grant CEEX, director de proiect prof. dr.ing. C. Botan, 2005-2007, valoare 2500 mil lei – membru în echipa proiectului/ 3 etape anuale
K11	Diagnoza anomaliilor proceselor utilizând sisteme neuro-fuzzy, grant CNCSIS 520 tip A, tema 40/2005, director grant ş.l. dr. ing. L. Mirea. 2005-2006, valoare 250,000,000 lei – membru în echipa proiectului/ 2 etape anuale
K12	Integrarea Petri Net Toolbox cu mediul Simulink si crearea de noi instrumente software, cu larga aplicabilitate in studierea dinamicilor hibride, contract nr. 33371/2004, grant CNCSIS 541 tip A, tema 33, director grant prof. dr. ing O. Pastravanu, 2004, valoare 200000000 lei – membru în echipa proiectului/ 1 etapă
K13	Sistem integrat de laboratoare pentru studiul domeniului fabricatiei asistate de calculator, grant CNFIS, contract nr. 41861/4.11.1999, finantare Banca Mondiala si Guvernul Romaniei, director grant prof. dr. ing. M. Voicu, 1999-2002, valoare 159250 USD – membru în echipa proiectului/ 2 etape: etapa 1 (2000-2001), etapa II (2002).
K14	Modernizarea învătământului de scurtă durată de la Facultatea de Automatică si Calculatoare a Universitătii Tehnice Gh.Asachi din Iasi, cod CNFIS 4-MC-2-0127, , finantare: Banca Mondiala si Guvernul Romaniei, director proiect conf. dr. ing. Alexandru Onea, 2001-2002, valoare 35000USD – membru în echipa proiectului/ 1 etapă
K15	Analiza si implementarea unor metode avansate de conducere a fabricatiei, grant CNCSIS cod 942, tema33, 2000, director de grant prof. dr. ing. M. Voicu, valoare 40000000 lei – membru în echipa proiectului/ 1 etapă anuală.
K16	Laborator de instruire in domeniul conducerii asistate de calculator a proceselor – LICAP, Universitatea Tehnica Iasi, cod 2MU-103, contract 12819/28.09.1998 (1998 - 2002). Finantare Banca Mondiala si Guvernul Romaniei. Director grant prof. Dr. ing O. Pastravanu, III, 2002, valoare 32,615 USD, etapa II, 2000-2001, valoare 93,900 USD, etapa I, 1999, valoare 23470 USD – membru în echipa proiectului/ 3 etape: etapa I (1999), etapa II (2000-2001), etapa III (2002).
K17	Utilizarea sistemelor de vedere artificială în conducerea roboţilor industriali - Metode de analiză a imaginilor 3D conţinând obiecte poliedrice, cod CNCSU 545, tema 47, contract nr. 37/1998. Director grant prof. Dr. ing. M. Voicu. Valoare 45,000,000 lei – membru în echipa proiectului/ 1 etapă anuală
K18	Metode de autoacordare a algoritmilor tipizaţi de conducere a proceselor industriale, cod 145,tema 4,contract nr. 7002/1997. Director grant prof. Dr. ing. M. Voicu. Valoare 22,885,000 lei – membru în echipa proiectului/ 1 etapă anuală.

K19 POCU 122333 - Oferte educaţionale noi şi flexibile în învăţământul terţiar universitar şi non-universitar tehnic conforme cu cerinţele pieţei muncii în schimbare - membru proiect - 2014-2021, responsabil TUIASI conf. dr. ing. Mihai Postolache

K20 Generation of Meaningful Representations of Volume Data Through Evolutionary Learning, VolEvol,AI4Media, H2020-EU.2.1.1., nr. 951911, director proiect s.l.dr.ing. Marius Gavrilescu

K21 Resilient Rapid Reconfigurable Production Process Chains Horizon GA no. 101091869 - R3GROUP, 2022-2024, responsabil TUIASI grup s.l. ing. Emil Loghin

K22 Unraveling Neurodegeneration: Innovative Therapeutic Discoveries through Brain Organoid Mode, UNIT-BRAIN, Ingenium, 2023-2024, responsabil TUIASI grup 1 conf.dr.ing. Lavinia Ferariu

K23 Platforma de evaluare a agenților și modelelor AI, PR/NE/2024/P1/RSO1.1_RSO1.3/1 - PROIECTE DE CDI ȘI INVESTIȚII ÎN IMM, nr. 729/9.07.2025, 2025-2028, responsabil proiect TUIASI

K24 Dezvoltare produs software inovativ FLIXIER, PR/NE/2024/P1/RSO1.1_RSO1.3/1 - proiecte de CDI și investiții în IMM, Cod proiect: 338593, număr contract 737/24.07.2025, 2025 – 2027, responsabil proiect TUIASI

K25 HUB Român de Inteligență Artificială – HRIA, cod SMIS 334906, 2025-2028, membru proiect

K26 DIGITAL INNOVATION ZONE EDIH-MANUFACTURING&SMART HEALTH for better business, life and health in the North East Romania region", cod SMIS 161826/323036. Membru proiect 2024-205.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 1/10/2025

Conf. dr. ing. Ferariu Lavinia Eugenia
Semnătura:

Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență Ingineria sistemelor

Numele şi prenumele: Budaciu Cristina

A. Teza de doctorat.

Teza de doctorat „*Tehnici Avansate de Control pentru Procese Energetice*", Coordonator prof.dr.ing. Mihail Voicu, Universitatea Tehnică Gheorghe Asachi din Iași, 2009

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Strategii de modelare și control pentru sisteme cu dinamică rapidă, C. Budaciu, Ed. Performantica, 2019, 161 pagini, ISBN 978-606-685-667-6

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Ingineria reglării automate, C.F.Căruntu, C. Budaciu, C.Lazăr, Ed. Politehnium, 978-973-621-414-1, 2013

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

Note de curs și Lucrări de laborator la disciplinele Strategii numerico-experimentale in dinamici structurale, Introducere în automatică - Moodle edu.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale și Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Popovici Alexandru-Tudor, Dosoftei Constantin-Catalin, Budaciu Cristina, Kinematics Calibration and Validation Approach Using Indoor Positioning System for an Omnidirectional Mobile Robot, *Sensors* **2022**, *22*(22), 8590; **https://doi.org/10.3390/s22228590**.

2. Dosoftei Constantin-Catalin; Popovici Alexandru-Tudor, Sacaleanu Petru-Razvan, Gherghel Paul-Marcelin, Budaciu Cristina, Hardware in the Loop Topology for an Omnidirectional Mobile Robot Using Matlab in a Robot Operating System Environment, *Symmetry* **2021**, *13*(6), 969; **https://doi.org/10.3390/sym13060969**

3. C. C. Dosoftei, A. -T. Popovici, P. -R. Sacaleanu and C. Budaciu, ***Real-Time Motion Control of an Electric Driven OMR using a ROS to Matlab Bridged Approach"*** 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 2021, pp. 160-165, doi: 10.1109/ICSTCC52150.2021.9607163

4. C. Budaciu, N. Botezatu, A. Burlacu and M. Kloetzer. On the Evaluation of the Crazyflie Modular Quadcopter System, Emerging Technologies and Factory Automation, ETFA 2019 (indexata IEEE, indexata Scopus)

5. C. Budaciu and L. Tudose, Design and implementation of a butterfly robot system, Emerging Technologies and Factory Automation ETFA 2019 (indexata IEEE, indexata Scopus)

6. Strategii de modelare și control pentru sisteme cu dinamică rapidă, C. Budaciu, Ed. Performantica, 2019, 161 pagini, ISBN 978-606-685-667-6

7. G. Brăteanu-Ungureanu, A. Prepeliţă and C. Budaciu. Two Wheels Lego Mindstorms Balancing Control Based on Discrete Time Delta Representation, 21st International Conference on System Theory, Control and Computing (ICSTCC), 2017
8. C. Budaciu, L.D. Apostol, Dynamic Analysis in Discrete Time Delta domain for Unstable Bicycle System, 20th International Conference on System Theory, Control and Computing (ICSTCC), pp.392-397, 2016
9. C. Budaciu, L.D. Apostol, Dynamic Analysis and Control of Lego Mindstorms NXT Bicycle, 20th International Conference on System Theory, Control and Computing (ICSTCC), pp.145-149, 2016
10. Budaciu C., Lazăr C., Predictive Control Strategy in Delta Domain for Damping Oscillations in a Driveline System ,17th IEEE International Conference on Emerging Technologies and Factory Automation, Kracow, 5-9 septembrie 2012, Poland
11. C. Budaciu and C. Lazar, Predictive Control Realization in Delta Domain for Automotive Powertrain System and Finite Word Length Representation, Journal of Control Engineering and Applied Informatics vol. 14 (4), pp. 50-58, ISSN 1454-8658, 2012
12. Budaciu C., Andreea E. Bălău, Lazăr C., State Space Delta GPC for Automotive Powertrain Systems,16th IEEE International Conference on Emerging Technologies and Factory Automation, Toulouse, France, 5-9 septembrie 2011
13. Levărdă B., Budaciu C. Temperature Control Application for a Ventilation System using PIC18F4620, 14th International Conference on System Theory and Control, Sinaia, ISSN 2068-0465, 2010, pp. 282-286.
14. Kadirkamanathan V., Halaucă C (Budaciu) C., Anderson S. Predictive control of fast-sampled systems using the delta-operator, International Journal of Systems Science, 40:7, 745-756, 2009, (ISSN: 0020-7721)
15. C. Halauca (Budaciu C.) and C. Lazar, Delta domain predictive control for fast, unstable and non-minimum phase systems, Journal of Control Engineering and Applied Informatics 10 (4), 26-31, 2008.
16. Halaucă C. (Budaciu C.), Lazăr C. The δ Discrete Model Parameterization of a Steam Drum Boiler System, Proc. of the 27th IASTED International Conference on Modelling, Identification and Control, Innsbruck, Austria, ISBN 978-0-88986-711-6, pp. 43-48, 11-13 Februarie 2008 (indexata Scopus, DBLP, ACM, INSPEC

G. Invenţii.

H. Contracte de cercetare/granturi.

1. **Membru** - "Dezvoltarea unui sistem logistic inteligent utilizând roboți mobili omnidirecționali autonomi" tipul Proiect de transfer la operatorul economic, nr. 19/2020, director grant Conf.dr.ing. Constantin-Cătălin Dosoftei, 2020-2022;
2. **Coordonator proiect** – Proiect Grant intern NR. GnaC2018_67/2019, Strategii de reglare pentru roboți mobili cu dinamică rapidă, 2019-2020, valoarea totala a proiectului: 28000 Ron
3. **Coordonator proiect** – Proiect de cercetare postoctoral PD 331 CNCSIS PN-II-RU cod PD 331, nr. 49/28.07.2010 având ca temă "Analiza Şi Dezvoltarea Unor Algoritmi De Reglare Predictivă În Domeniul Discret Delta", Valoare totală a proiectului 2010-2012: 263260.67Ron
4. **Membru** proiect PN-III-P1-1.1-TE-2016-0737, nr. 32/2018 Navigarea roboților mobili cooperativi în aplicații complexe (MRCA), 2018-2020, director grant Marius Kloetzer
5. **Membru** grant H2020-PHC-26_2014 643636 - Sound of Vision - RIA - director grant, prof. Vasile Manta
6. **Membru** proiect: "Insertia absolventilor prin stagii de pregatire PRACtica moderne si eficiente din cadrul Universitatii TEHnice Gheorghe Asachi din Iasi, pe piata muncii – PRACTEH", Contract POCU/626/6/13/131181 (OIPOSDRU NE 10372/21.09.2020)
7. **Membru** Proiect strategic: Retea nationala de centre pentru dezvoltarea programelor de studii cu rute flexibile si a unor instrumente didactice la specializarea de licenta si masterat, din domeniul Ingineria Sistemelor, E5493/06.07.2010 POSDRU/86/1.2/63806
8. **Membru** Proiect strategic: Oferte educaționale noi și flexibile în învățământul terțiar universitar și non-universitar tehnic conforme cu cerințele pieții muncii în schimbare (POCU/320/6/21/122333)

9. **Membru** Grant CEEX, Platformă GIS integrată pentru analiza, proiectarea, simularea şi optimizarea funcţionării reţelelor de alimentare cu apă şi de canalizare, Contract nr. 63/28.07.2006, director prof. dr.ing. Dan Gâlea.
10. **Membru** Contract cu SC CET Iasi SA, nr. 1475/29.07.2005, Proiectarea si implementarea unor noi structuri de reglare pentru parametrii tehnologici debit, presiune, gaz metan si nivel tambur de la cazanele de 420 t/h cu combustibili hidrocarburi, Finanţare: S.C. C.E.T Iaşi S.A. director grant C. Lazar.
11. **Membru:** Grant Laborator virtual de acţionări electrice de mică putere cu utilizare de ladistanţă prin Internet (LVAEMP-INTERNET), Contract nr. 77 GR/21.06.2008, Tema nr. 3 Cod CNCSIS 266/2006, director prof. dr. ing. Gh. Băluţă

12. Premii, distincţii.

13. Alte realizări semnificative.
14.

Membru în comitete de colaborare cu companii
1. Membru Comitetul de Colaborare cu Continental Automotive România S.R.L pentru etapa de modernizare şi dotare a laboratorului Learn and Practice Automation – Continental Automotive Laboratory (LPA-CAL).
2. Membru în Comitetul de Colaborare cu Automotive Safety Technologies GMbH - Germania.
3. Membru în Comitetul de organizare a competiției ASTech Student Tournament, Ediţiile 2019 și 2020.
4. Membru in comisie de jurizare - FIRST LEGO League Romania, Editiile 2020, 2021.

Referent pentru: ISA Transaction, Energies, Symmetry, Sensors.

Data: 29/09/2025

Conf.dr.ing. Budaciu Cristina
Semnătura:

A.3.3.c.-Lista de lucrări, cadre didactice

Lista de lucrări în domeniul de studii universitare de master Mecatronică și Robotică

Numele și prenumele: **Pascal Carlos-Mihai**

A. Teza de doctorat.

Arhitecturi Adaptive Bazate pe Agenți pentru Conducerea Fluxurilor de Activități, conducător științific prof. dr. ing. Octavian Păstrăvanu, Universitatea Tehnică „Gheorghe Asachi" din Iași, **2011**.

B. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

Capitole de cărți publicate în străinătate

1. **Pascal, C.**, Panescu, D. (2023). On Practical Activities for Education in Industry 4.0. In: Borangiu, T., Trentesaux, D., Leitão, P. (eds) Service Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future. Studies in Computational Intelligence, vol 1083. Springer, Cham. https://doi.org/10.1007/978-3-031-24291-5_21, ISBN:978-3-031-24290-8

2. **Pascal, C.,** Pănescu, D. (2022). Applying Learning-Assisted Systems in Manufacturing. In: Borangiu, T., Trentesaux, D., Leitão, P., Cardin, O., Joblot, L. (eds) Service Oriented, Holonic and Multi-agent Manufacturing Systems for Industry of the Future. SOHOMA 2021. Studies in Computational Intelligence, vol 1034. Springer, Cham. https://doi.org/10.1007/978-3-030-99108-1_5, ISBN:978-3-030-99107-4

3. **Pascal, C.,** Pănescu, D., Dosoftei, C. (2021). About the Applicability of IoT Concept for Classical Manufacturing Systems. In: Borangiu, T., Trentesaux, D., Leitão, P., Cardin, O., Lamouri, S. (eds) Service Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future. SOHOMA 2020. Studies in Computational Intelligence, vol 952. Springer, Cham. https://doi.org/10.1007/978-3-030-69373-2_2, ISBN:978-3-030-69372-5

4. **Pascal, C.,** Panescu, D. (2018). On Increasing Adaptability of Holonic Systems. In: Borangiu, T., Trentesaux, D., Thomas, A., Cardin, O. (eds) Service Orientation in Holonic and Multi-Agent Manufacturing. Studies in Computational Intelligence, vol 762. Springer, Cham. https://doi.org/10.1007/978-3-319-73751-5_17, ISBN:978-3-319-73750-8 (indexată WoS)

5. Panescu, D., **Pascal, C.** (2016). A Synchronous CNP-Based Coordination Mechanism for Holonic Manufacturing Systems. In: Borangiu, T., Trentesaux, D., Thomas, A., McFarlane, D. (eds) Service Orientation in Holonic and Multi-Agent Manufacturing. Studies in Computational Intelligence, vol 640. Springer, Cham. https://doi.org/10.1007/978-3-319-30337-6_16, ISBN:978-3-319-30335-2 (indexată WoS)

6. Panescu, D., **Pascal, C.** (2014). An Extended Contract Net Protocol with Direct Negotiation of Managers. In: Borangiu, T., Trentesaux, D., Thomas, A. (eds) Service Orientation in Holonic and Multi-Agent Manufacturing and Robotics. Studies in

Computational Intelligence, vol 544. Springer, Cham. https://doi.org/10.1007/978-3-319-04735-5_6, ISBN:978-3-319-04734-8 (indexată WoS)

7. **Pascal, C.**, Panescu, D. (2013). HAPBA - A BDI Agent Based Solution for Holonic Manufacturing Execution Systems. In: Borangiu, T., Thomas, A., Trentesaux, D. (eds) Service Orientation in Holonic and Multi Agent Manufacturing and Robotics. Studies in Computational Intelligence, vol 472. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-35852-4_4, ISBN:978-3-642-35851-7

8. Panescu, D., **Pascal, C.** (2012). HAPBA – A Holonic Adaptive Plan-Based Architecture. In: Borangiu, T., Thomas, A., Trentesaux, D. (eds) Service Orientation in Holonic and Multi-Agent Manufacturing Control. Studies in Computational Intelligence, vol 402. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-27449-7_5, ISBN 978-3-642-27448-0 (indexată WoS)

C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS (sau CNCS).

1. **Pascal C,** Abordare metodologică a modelării și simulării arhitecturilor bazate pe agenți, Performantica, Iași, **2024**, 83p.
2. Pănescu D, **Pascal C,** Programare bazată pe reguli, Îndrumar de laborator, Editura Conspress, București, **2013**, 100p, ISBN 978-973-100-258-3.

D. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.
E. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.
F. Lucrări științifice publicate în reviste cotate ISI sau indexate BDI.

Lucrări indexate ISI

1. Bejenar I, Ferariu L, **Pascal C**, Caruntu CF, Aggregation Methods Based on Quality Model Assessment for Federated Learning Applications: Overview and Comparative Analysis, Mathematics, 11(22), 4610, WOS:001168808200001, **2023**, https://doi.org/10.3390/math11224610 (Fi2023:2.3 – Q1)

2. Lazar RG, Militaru AV, Caruntu CF, **Pascal C**, Patachia-Sultanoiu C, Real-time data measurement methodology to evaluate the 5G network performance indicators. IEEE Access, WOS:000986552300001, **2023**. https://doi.org/10.1109/ACCESS.2023.3271366 (Fi2023:3.4 – Q2)

3. Doroftei I, Chirita D, Stamate C, Cazan S, **Pascal C**, Burlacu A, Robotic system design and development for automated dismantling of PCB waste. Industrial Robot: the international journal of robotics research and application, WOS:000624070800001, **2021**. https://doi.org/10.1108/IR-11-2020-0246 (Fi2020:1.352, Fi2023:1.9 – Q4)

4. **Pascal C**, Panescu D, On rescheduling in holonic manufacturing systems, Computers in Industry, vol. 104, pp.34-46, WOS:000455069900004, **2019**. https://doi.org/10.1016/j.compind.2018.09.010 (Fi2019:3.954 Fi2023:8.2 – Q1)

5. **Pascal C**, Panescu D, A colored Petri net model for DisCSP algorithm, Concurrency and Computation - Practice and Experience, vol. 29(18), WOS:000408128100005, **2017**. https://doi.org/10.1002/cpe.4179 (Fi2017:1.114 Fi2023:2 – Q3)

6. Panescu D, **Pascal C**, Holonic coordination obtained by joining the contract net protocol with constraint satisfaction, Computers in Industry, vol. 81, pp 36-46, WOS:000378954700004, **2016**. https://doi.org/10.1016/j.compind.2015.08.010 (Fi2016: 2.691 Fi2023: 8.2 – Q1)

7. Panescu D, **Pascal C**, On a holonic adaptive plan-based architecture: planning scheme and holons' life periods, The International Journal of Advanced Manufacturing Technology, vol. 63, Numbers 5-8, 753-769, Springer, London, WOS:000310320800028, **2012**, November, https://doi.org/10.1007/s00170-012-3930-9, (Fi2012: 1.205 Fi2023:2.9 – Q2)

8. **Pascal C**, Panescu D, Modeling a Holonic Agent based Solution by Petri Nets, Computer Science and Information Systems, vol. 9(3), ISSN 1287-1306, pg. 1287-1305, WOS:000309649500013 **2012**. September https://doi.org/10.2298/CSIS111223031P, (Fi2012:0.549 Fi2023:1.9 – Q4)

9. Panescu D, Kloetzer M, Burlacu A, **Pascal C**, Artificial Intelligence based Solutions for Cooperative Mobile Robots, Control Engineering and Applied Informatics Journal, vol. 14(1), pg 74-82, WOS:000302506600010, **2012**. (Fi2012:0.202 Fi2023:0.4 – Q4)

G. Lucrări științifice publicate în reviste din străinătate.
H. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS.
I. Lucrări științifice publicate în volumele conferințelor.

Lucrări în volume indexate ISI

1. Paleu, TA, Burlacu A, **Pascal C**, Policy transfer with maximum entropy deep reinforcement learning for real cart-pole control. In 2024 IEEE 20th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 1-7). IEEE, 2024, WOS:001450074600047

2. Cleju N, **Pascal C**, Comsa CR, Caruntu CF, Ciocoiu IB, Patachia-Sultanoiu C, and Mihai R, Towards Efficient Urban Mobility: Deployment Strategies for Smart Traffic Management and Crowd Monitoring Systems. In 2024 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit) (pp. 997-1002), IEEE, **2024**, WOS: 001275093600065

3. Bejenar I, Ferariu L, **Pascal C**, Caruntu CF, FedAcc and FedAccSize: Aggregation Methods for Federated Learning Applications, 31st Mediterranean Conference on Control and Automation (MED), pp. 593-598, IEEE, **2023**, doi:10.1109/MED59994.2023.10185810, WOS:001042336800095

4. Mihalcea MA, **Pascal C**, Alupoaei SI, A View of the 5G Network in Iasi City for Automotive. In 2022 26th International Conference on System Theory, Control and Computing (ICSTCC), pp. 601-606, IEEE, doi:10.1109/ICSTCC55426.2022.9931887, **2022** WOS:000889980600101

5. Lipovanu I, **Pascal C**, A rule-based enhancement of a vision guided, collision-free robotic application. In 25th International Conference on System Theory, Control and Computing (ICSTCC), pp. 559-563, IEEE, doi:10.1109/ICSTCC52150.2021.9607077, **2021** WOS:000859487900092

6. Caruntu CF, **Pascal C**, Ferariu L, Comsa CR, Trajectory optimization through connected cooperative control for multiple-vehicle flocking. In 28th Mediterranean Conference on Control and Automation (MED), pp. 915-920, IEEE. **2020** WOS:000612207700149

7. Zamfirescu I, **Pascal C**, Modelling and simulation of an omnidirectional mobile platform with robotic arm in CoppeliaSim. In 24th International Conference on System Theory, Control and Computing (ICSTCC), pp. 667-672. IEEE. **2020**

8. **Pascal C**, Lipovanu I, Rule-based extension through IoT for a robotized application. In 24th International Conference on System Theory, Control and Computing (ICSTCC), pp. 559-563. IEEE, **2020**. WOS:000646582900092

9. Caruntu CF, **Pascal C**, Maxim A, Pauca O, Bio-inspired Coordination and Control of Autonomous Vehicles in Future Manufacturing and Goods Transportation. IFAC-PapersOnLine, 53(2), pp.10861-10866, **2020**, WOS:000652593100331

10. Caruntu CF, Ferariu L, **Pascal C**, Cleju N, Comsa CR, Connected cooperative control for multiple-lane automated vehicle flocking on highway scenarios. In 23rd International Conference on System Theory, Control and Computing (ICSTCC), pp. 791-796, **2019**. IEEE. WOS:000465109800106

11. Dosoftei CC, Lupu A, **Pascal C**, A new approach to create a realistic virtual model of a cylindrical robot using Automation Studio. In IOP Conference Series: Materials Science and Engineering, Vol. 591, No. 1, p. 012078,. IOP Publishing, **2019** WOS:000562929900078

12. Caruntu CF, Ferariu L, **Pascal C**, Cleju N, Comsa CR, A concept of multiple-lane vehicle grouping by swarm intelligence. In 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), pp. 1183-1188, IEEE, **2019** WOS:000556596600152

13. **Pascal C**, Raveica LO, Panescu D, Robotized application based on deep learning and Internet of Things. In 22nd International Conference on System Theory, Control and Computing (ICSTCC), pp. 646-651, IEEE, 10.1109/ICSTCC.2018.8540714, **2018**. WOS:000465109800106

14. **Pascal C**, Panescu D, On improving efficiency of DisCSP Methods, 21st International Conference on System Theory, Control and Computing (ICSTCC), pg. 82-87, doi.org/10.1109/ICSTCC.2017.8107015, **2017**. WOS:000427419900013

15. **Pascal C**, Panescu D, On Applying DisCSP for Scheduling in Holonic Systems, 20th International Conference on System Theory, Control and Computing (ICSTCC), pg. 423-428, **2016**. WOS:000391609900072

16. Panescu D, **Pascal C**, Olaeru RM, A Rule-Based Approach for a Multi-Robot Application, Proceedings of 19th International Conference on System Theory, Control, and Computing (ICSTCC), pp. 75-80, INSPEC, **2015**, doi: 10.1109/ ICSTCC.2015.7321272, WOS:000382384100013

17. **Pascal C**, Panescu D, A Petri Net Model for Constraint Satisfaction Application in Holonic Systems, 2014 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), ISBN: 978-1-4799-3731-8, DOI: 10.1109/ AQTR.2014.6857900, **2014**. WOS:000346131600066

18. Panescu D, **Pascal C**, A constraint satisfaction approach for planning of multi-robot systems. In 2014 18th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 157-162), IEEE, **2014** WOS:000704338900028

19. Burlacu A, Copot C, Panainte A, **Pascal C**, Lazar C, Real-time Image based Visual Servoing Architecture for Manipulator Robots. In VISAPP (pp. 502-510), **2011**, WOS:000393718200071

20. Panescu D, Varvara G, **Pascal C**, Sutu M, On the design and implementation of the resource holons in a PROSA based architecture. International Conference on Intelligent Engineering Systems (pp. 101-106). IEEE. **2009**, WOS:000270809000016

21. Panescu D, **Pascal C**, Sutu M, Varvara G, Collaborative robotic system obtained by combining planning and holonic architecture. In Advanced technologies for enhanced quality of life (pp. 138-143). IEEE. **2009**, WOS:000273611600034

Lucrări în volume indexate BDI

1. Bejenar I, Ferariu L, **Pascal C**, Caruntu, CF, FedBayes: An Aggregation Method for Federated Learning that uses Bayesian Regression. In 2024 28th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 564-569). IEEE, **2024**

2. Paleu TA, **Pascal C**, Reproducibility in Deep Reinforcement Learning with Maximum Entropy, 27th International Conference on System Theory, Control and Computing (ICSTCC), 428-433, IEEE, DOI: 10.1109/ICSTCC59206.2023.10308431, **2023**

3. Panescu D, **Pascal C**, On the staff holon operation in a holonic manufacturing system architecture. In 2012 16th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 1-6). IEEE, **2012**

4. Panescu D, **Pascal C**, Some Issues on Holonic Systems Analysis, Design and Implementation, International Journal of Mechanics and Control, Vol. 12, No. 1, pp. 11-17, ISSN 1590 – 8844. **2011** (Indexată scopus)

5. **Pascal C**, Panescu D, On resource allocation in a holonic manufacturing execution system. In 15th International Conference on System Theory, Control and Computing (pp. 1-6). IEEE. **2011**

6. Panescu D, Sutu M, **Pascal C**, On the design and implementation of holonic manufacturing systems. In 2009 WRI World Congress on Computer Science and Information Engineering (Vol. 5, pp. 456-461). IEEE, **2009**

J. Invenții.

K. Contracte de cercetare/granturi.

1. Trialssupport by Smart Networks beyond 5G – TrialsNet, tip Horizon-JU-IA, Contract nr. 101095871/23.11.2022, responsabil proiect Conf.dr.ing. Ciprian Comșa, valoare totala TUIasi: 73000000 RON – Membru, 2022 – prezent
2. Grant Intern tip top-down, nr. GI-TD-DigitAll-2 /2022, finanțat din Fonduri pentru cercetare științifică universitară a TUIASI, perioada desfășurare 12.2022 - 06.2023, director: Prof. dr. ing. Radu Gabriel Bozomitu, valoare totala: 96525 RON na=4
3. Grant Intern tip top-down, nr. GI-TD-DigitAll-7 /2022, finantat din Fonduri pentru cercetare științifică universitară a TUIASI, perioada desfasurare 12.2022 - 06.2023, director: Conf. dr. ing. Catalin Dosoftei, valoare totala: 96525 RON, na=4
4. PNCDI PN-III-P1-1.1-TE, nr. TE190/2021, etapa 1, director proiect Prof.dr.ing. Caruntu, valoare proiect 2021 = 230.221, 2022 = 201.321 lei, na = 6
5. PTE 19/2020 ROSY LOGISTIC, director: Ș.l. dr. ing. Catalin Dosoftei, valoari proiect 2020 = 206.957 lei, 2021 = 169148 lei, 2022 = 61.225 lei, na = 14
6. ARUT, Grant intern TUIasi - Extinderea unei celule robotizate conform principiilor IoT, Nr. GnaC2018_186/2019, 6.2019 – 5.2020, director: Ș.l. dr. ing. C. Pascal (25.000 lei), 2019, na=1
7. Agent economic, Grid platooning by swarm intelligence, contract de parteneriat cu Continental Automotive Romania, Contract Nr. 23928/31.10.2018, 11.2018 – 12.2018, director contract: prof. dr. ing. Constantin Căruntu, valoare 87722 lei, 2018, na=6
8. Grantul PNII, Platforme robot-vedere artificiala autonome, inteligente de calificare, sortare/prelucrare/ambalare si inspectie de calitate a produselor cu arhitectura de control holonic, orientata pe servicii, bazata pe trasaturi (SOFHICOR), Contract nr. 11-042 din 18.09.2007, Responsabil TUIasi prof. dr. ing. Doru PĂNESCU, (valoare etapa 2010, 16000 lei, 26% participare), (valoare etapa 2009 85970 lei, 17%participare)
9. Doctorand în cadrul unui grant din fonduri structurale cu componente de cercetare: "BURSE DOCTORALE – O investiție în inteligenta (BRAIN)" ID 6681, proiect strategic finanțat în perioada 2008-2011, cu tema: Arhitecturi Adaptive Bazate pe Agenți pentru Conducerea Fluxurilor de Activități, valoare 72150 RON.

L. Premii, distincții.
M. Alte realizări semnificative.

Data: 27/09/2025

Conf. dr. ing. **Pascal Carlos-Mihai**

Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică și Informatică Aplicată și Sisteme Inteligente/ Ingineria sistemelor

Numele şi prenumele: MAXIM Anca

A. **Teza de doctorat.**

1. **Maxim A.**, *Distributed Model Predictive Control for Dynamically Coupled Systems*, 225 pg, 2019, doctorat în cotutelă între Universitatea Tehnică „Gheorghe Asachi" din Iași, România, domeniul Ingineria sistemelor, conducător de doctorat prof.dr.ing. Corneliu Lazăr și Universitatea Ghent, Belgia, domeniul Inginerie, conducător de doctorat prof.dr.ing. Clara Mihaela Ionescu.

B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**

1. **Maxim A.**, Ionescu C.M, *A Model-Based Optimal Distributed Predictive Management of Multidrug Infusion in Lung Cancer Patient Therapy*, pag 235-256, cap 10 in cartea: Computational and Mathematical Models in Biology. Pinto, C.M., Ionescu, C.M. (editori), seria Nonlinear Systems and Complexity, vol 38. Springer, Cham, 2023.

C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).**

1. **Maxim A.**, *Distributed Model Predictive Control for Dynamically Coupled Systems*, Ed. MatrixRom, Bucureşti, 2021, ISBN 978-606-25-0657-5, 134 pag.
2. Căruntu C.F., **Maxim A.** şi Lazăr C., *Advanced control strategies for networked/distributed systems – theory and applications*, Ed. MatrixRom, București, 2019, ISBN 978-606-250-504-2, 129 pag.
3. **Maxim A.**, Păucă O., Lazăr C, *Ingineria Reglării Automate – Îndrumar de laborator*, Ed. MatrixRom, București, 2024, ISBN 978-606-25-0935-4, 74 pagini.

D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.**

E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.**

1. Ingineria reglării automate – Laborator 2016-2025
2. Ingineria Reglarii – Curs 2020-2025
3. Identificarea Sistemelor – Laborator 2022-2025
4. Ethics and Integrity – Seminar engleza 2019-2025
5. Ethics in Artificial Intelligence and Professional Integrity – Seminar Engleza 2023-2025

F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.**

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **Maxim A.**, Pauca O.,Caruntu C. F., *Coalitional Distributed Model Predictive Control Strategy with Switching Topologies for Multi-Agent Systems,* Electronics, 13 (4), pp. 792, 2024 **(IF: 2.6 –Q2)**
2. **Maxim A.**, Pauca O., Amariei R. G., Braescu F. C., Caruntu C. F., *Coalitional Control Strategy for a Heterogeneous Platoon Application*, Mathematics, 12 (1), pp 7, 2024 **(IF: 2.3 –Q1)**
3. Lazar R. G., Pauca O., **Maxim A.**, Caruntu C. F., *Control Architecture for Connected Vehicle Platoons: From Sensor Data to Controller Design Using Vehicle-to-Everything Communication*, Sensors, 23 (17), pp. 7576, 2023 **(IF: 3.4–Q2)**
4. **Maxim A.,** Pauca O., Caruntu C. F., *Distributed Model Predictive Control and Coalitional Control Strategies-Comparative Performance Analysis Using an Eight-Tank Process Case Study*, Actuators, 12 (7), pp. 281, 2023 **(IF: 2.2–Q2)**
5. **Maxim A.,** De Keyser R., *Estimation of First Order Plus Dead Time and Second Order Plus Dead Time models from noisy step response data,* Asian Journal of Control, 25 (3), pp. 1791-1804, 2023 **(IF: 2.7–Q2)**
6. **Maxim A.**, Caruntu C. F., *Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications,* Sensors, 22 (3), pp. 997, 2022, **(IF: 3.4 – Q2).**
7. Pauca O., **Maxim A.**, Caruntu C. F., *Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework,* Sensors, 21 (12), pp. 3968, 2021 **(IF: 3.4 – Q2)**
8. **Maxim A.**, Caruntu C. F., *A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application,* Sensors, 21 (12), pp. 4041, 2021, **(IF: 3.4 – Q2)**
9. Pauca O., **Maxim A.**, Caruntu C. F., *Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds,* IEEE Access, 9 (-), pp. 153472-153490, 2021 **(IF: 3.4 – Q2)**
10. Zhao S., **Maxim A.**, Liu S., De Keyser R., and Ionescu C. M., *Distributed Model Predictive Control of Steam/Water Loop in Large Scale Ships*, Processes, 7 (7), pp 442, 2019 **(IF: 2.8 – Q2)**
11. **Maxim A.**, Ferracuti R., and Ionescu C. M., *A Theoretical Framework to Determine RHP Zero Dynamics in Sequential Interacting Sub-Systems*, Algorithms, 12 (5), pp 102, 2019 **(IF: 1.8 – Q2)**
12. **Maxim A**., Copot D., Copot C. and Ionescu C. M., *The 5Ws for Control as Part of Industry 4.0: Why, What, Where, Who, and When - A PID and MPC Control Perspective*, Inventions, Special Issue Automatic Control and System Theory, 4 (1), pp 10, 2019. **(IF: 2.1 – Q2)**.
13. Zhao S., **Maxim A.**, Liu S., De Keyser R. and Ionescu C. M., *Effect of Control Horizon in Model Predictive Control for Steam/Water Loop in Large-Scale Ships*, Processes, 6 (12), pp 265, 2018 **(IF: 2.8 – Q2)**
14. **Maxim A.,** Copot D., De Keyser R., and Ionescu C. M, *An industrially relevant formulation of a distributed model predictive control algorithm based on minimal process information*, Journal of Process Control, 68 (-), pp 240-253, 2018 **(IF: 3.3 – Q2)**
15. Muresan C. I., Dutta A., Dulf E. H., Pinar Z., **Maxim A.**, Ionescu C. M., *Tunning algorithms for fractional order internal model controllers for time delay processes*, International Journal of Control, 89 (3), pp 579-593, 2016 **(IF: 1.6 – Q3)**

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. **Lucrări ştiinţifice publicate în reviste din străinătate.**

H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.**

1. **Maxim A.**, Pauca O., Caruntu C.F., *Coalitional Control Algorithm For A Vehicle Platooning Application – A Selfish Approach*, Buletinul Institutului Politehnic Iasi, 69 (73), pp. 39–65, 2023. (indexată ZMATH).
2. Pauca O, Caruntu C. F., **Maxim A.**, Lazar C., *Control architecture for automated Vehicles to ensure obstacle avoidance*, Buletinul Institutului Politehnic Iasi, 66 (70), pp. 71–83, 2020. (indexată ZMATH).
3. **Maxim A.**, Căruntu C. F., Lazăr C., *Implementation issues for distributed model predictive control of a two agent system*, Buletinul Institutului Politehnic Iasi, LX(LXIV), pp. 69–85, pg. 17, 2014. (indexată ZMATH).

I. **Lucrări ştiinţifice publicate în volumele conferinţelor.**

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Hegedus ET, **Maxim A.**, Mihai MD., Birs IR., Badau N., Muresan CI., *Multivariable control in general anesthesia: A comparative study of model predictive control and fractional-order strategies for effect-site concentration and hemodynamic regulation*, 12th International Joint Conference on Cybernetics and Computational Cybernetics, Cyber-Medical Systems (ICCC), Seychelles, Apr 09-11, pp. 000027-000032, 2025.
2. **Maxim A.,** Pauca O., Lazar R.G., Amarandei C-M., Caruntu C.F., *Cloud-Based DMPC Simulation for Autonomous Mobile Robot Platooning*, 28th International Conference on System Theory Control and Computing (ICSTCC), Sinaia, Romania, Oct. 10-12, pp. 32-37, 2024.
3. Pauca O., Lazar R.G., **Maxim A.**, Caruntu C.F., *Coalitional Control for Mobile Robots Formation in Logistic Applications*, 28th International Conference on System Theory Control and Computing (ICSTCC), Sinaia, Romania, Oct. 10-12, pp. 451-456, 2024.
4. Pauca O., **Maxim A.**, Maestre J. M., Caruntu C. F., *Bio-inspired control by overlapping adaptive clusters: a vehicle platoon case study*, IFAC PAPERSONLINE, 56 (2), pp. 1460-1465, 2023
5. **Maxim A.**, Pauca O., Caruntu C. F., *Assessment of Control Efficiency in a Vehicle Platooning Application*, European Control Conference (ECC), Bucharest, Romania, Jun 13-16, pp. 1270-1275, 2023
6. Pauca O., **Maxim A.**, Caruntu C. F., Vehicle Trajectory Planning for Collision Avoidance with Mobile Obstacles, 26th International Conference on System Theory Control and Computing (ICSTCC), Sinaia, Romania, Oct. 19-21, pp. 607-612, 2022

7. **Maxim A.**, Pauca O., Maestre J. M., Caruntu C. F., *Assessment of computation methods for coalitional feedback controllers*, European Control Conference (ECC), London, England, Jul 12-15. pp. 1472-1477, 2022
8. Pauca O., **Maxim A.**, Caruntu C. F., *Communication topologies evaluation for a vehicle merging into a platoon on highway*, 30th Mediterranean Conference on Control and Automation (MED), Athens, Greece, Jun 28-Jul 1, pp. 957-962, 2022
9. **Maxim A.**, Copot D., *Closed-loop control of anesthesia and hemodynamic system: a Model Predictive Control approach*, IFAC PAPERSONLINE, 54 (15), 11th IFAC Symposium on Biological and Medical Systems (BMS), Ghent, Belgium, pp. 37-42, 2021
10. Pauca O., **Maxim A.**, Caruntu C. F., *Cooperative Platoons Merging for Obstacle Avoidance on Highways*, 25th International Conference on System Theory, Control and Computing (ICSTCC), Iasi, Romania, pp. 25-30, 2021
11. Pauca O., **Maxim A.**, Caruntu C. F., *Trajectory Planner based on Third-order Polynomials applied for Platoon Merging and Splitting*, 29th Mediterranean Conference on Control and Automation (MED), Bari, Puglia, Italy, pp. 83-88, 2021
12. Pauca O., Maxim A., Caruntu C. F., *DMPC-based Data-packet Dropout Compensation in Vehicle Platooning Applications using V2V Communications,* European Control Conference (ECC), Electr Network, Jun 29-Jul 02,pp. 2639-2644, 2021
13. Caruntu C. F., Pascal C., **Maxim A.**, Pauca O., *Bio-Inspired Coordination and Control of Autonomous Vehicles in Future Manufacturing and Goods Transportation*, 21st IFAC World Congres, Berlin, Germany, pp 11008-11013, 2020.
14. **Maxim A.**, Pauca O., Caruntu C. F., Lazar C., *Distributed Model Predictive Control Algorithm with Time-Varying Communication Delays for a CACC Vehicle Platoon*, 24th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 775-780, 2020
15. Pauca O., Caruntu C. F., and **Maxim A.**, *Trajectory Planning and Tracking for Cooperative Automated Vehicles in a Platoon*, 24th International Conference System Theory, Control and Computing, Sinaia, Romania, pp 769-774, 2020.
16. **Maxim A.**, Lazar C., and Caruntu C. F., *Distributed Model Predictive Control Algorithm with Communication Delays for a Cooperative Adaptive Cruise Control Vehicle Platoon*, 28th Mediterranean Conference on Control and Automation, Saint-Raphaël, France, pp. 909-914, 2020.
17. Ionescu C. M., Haeemers M., **Maxim A.**, Copot C., Derammelaere S., and Stockman K., *Automatic tuning of predictive control in a hydrostatic drive train system in nominal operation*, 23rd International Conference System Theory, Control and Computing, Sinaia, Romania, pp. 785-790, 2019.
18. Copot D., Kusse F., Ghita M., Ghita M., Neckebroek M., **Maxim A.**, *Distributed model predictive control for hypnosis-hemodynamic maintenance during anesthesia*, 23rd International Conference System Theory, Control and Computing, Sinaia, Romania, pp. 638-643, 2019.
19. **Maxim A.**, Caruntu C. F., Lazar C., De Keyser R., Ionescu C. M., *Comparative Analysis of Distributed Model Predictive Control Strategies*, 23rd International Conference System Theory, Control and Computing, Sinaia, Romania, pp. 468-473, 2019.
20. **Maxim A.**, Maestre J.M., Căruntu C.F., Lazăr C., *Min-max coalitional model predictive control algorithm*, 22nd International Conference on Control Systems and Computer Science, Bucharest, Romania, pp.24-29, 2019.

21. Copot D., Kusse F., Ghita M., Ghita M., Neckebroek M., **Maxim A.**, *Distributed model predictive control for hypnosis-hemodynamic maintenance during anesthesia*, 23rd International Conference System Theory, Control and Computing, Sinaia, Romania, pp. 638-643, 2019.
22. Căruntu C.F., Rafailă R.C., **Maxim A.**, *Multiple-lane vehicle platooning based on a multi-agent distributed model predictive control strategy*, 22nd International Conference on System Theory, Control and Computing, Sinaia, Romania, pp. 759-765, 2018.
23. **Maxim A.,** Maestre J.M., Căruntu C.F., Lazăr C., *Robust coalitional distributed model predictive control algorithm with stability via terminal constraint*, 2nd IEEE Conference on Control Technology and Applications, Copenhagen, Denmark, pp. 964–969, 2018.
24. **Maxim A.,** Copot D., Ionescu C. M., De Keyser R., *A methodology for control structure adaptation in presence of varying, unknown sub-system interaction degree*, 22nd IEEE International Conference on Emerging Technologies And Factory Automation, Limassol, Cyprus, 2017.
25. **Maxim A.**, Căruntu C.F., Lazăr C., *Cruise and headway control for vehicle platooning using a distributed model predictive control algorithm*, 21st International Conference on System Theory, Control and Computing, Sinaia, Romania, pp. 146-151, 2017. 1.33p
26. **Maxim A.,** Căruntu C.F., Lazăr C., *Distributed model predictive control algorithm for vehicle platooning*, 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, pp. 657-662, 2016.
27. Căruntu C.F., Brăescu F.C., **Maxim A.**, Rafailă R.C., Țigănașu A., *Distributed model predictive control for vehicle platooning: a brief survey*, 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, pp. 644-650, 2016.
28. Copot D., **Maxim A.**, De Keyser R. Ionescu C. M., *Multivariable control of sextuple tank system with non-minimum phase dynamics*, 20th IEEE International Conference on Automation, Quality and Testing, Robotics, Cluj-Napoca, Romania, 2016.
29. **Maxim A.**, Ionescu C. M., De Keyser R., *Modelling and identification of a coupled sextuple water tank system*, 20th IEEE International Conference on Automation, Quality and Testing, Robotics, Cluj-Napoca, Romania, pp. 393-398, 2016.
30. Ionescu C. M., Copot D., **Maxim A.**, Dulf E., Both R., De Keyser R., *Robust autotuning MPC for a class of process control applications*, 20th IEEE International Conference on Automation, Quality and Testing, Robotics, Cluj-Napoca, Romania, pp. 369-374, 2016.
31. Ionescu C. M., **Maxim A.**, Copot C., De Keyser R., *Robust PID Autotuning for the quadruple tank system,* 11th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, Trondheim Norway, pp 919-924, 2016.
32. **Maxim A.,** Ionescu C.M., Căruntu C.F., Lazăr C., De Keyser R., *Reference tracking using a non-cooperative distributed model predictive control algorithm*, 11th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, Trondheim, Norway, pp. 1079-1084, 2016.
33. **Maxim A.,** Lazăr C. and Căruntu C.F., *A computationally efficient non-cooperative distributed model predictive control algorithm for two agent systems*, 20th International Conference on Control Systems and Computer Science, 4th International Symposium on Cyber Physical Systems, Bucharest, Romania, pp. 673–678, 2015.

34. **Maxim A.**, Ionescu C. M., Copot C., De Keyser R., Lazar C., *Multivariable model-based control strategies for level control in a quadruple tank process*, 17th International Conference System Theory, Control and Computing, Sinaia, Romania, pp 343-348, 2013.

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. **Maxim A.**, Lazar C, Burlacu A., Copot C., *Robotic visual servoing system based on SIFT features*, 16th International Conference System Theory, Control and Computing, Sinaia, Romania, 2012.

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi.

1. **Director în proiectul de cercetare** cu titlul *"Strategii de control coaliţional pentru sisteme multi-agent în reţea* (SOCESMAR)", finanţat în programul Granturi Naţionale de Cercetare – ARUT, din Fondul pentru Finanţarea Cercetării Ştiinţifice Universitare şi Venituri Proprii TUIASI, nr. GNaC2023_252/2024, 01/03/2024- 30/04/2025, valoare: 49.771 RON.
2. **Coordonator** echipa de cercetare numărul 5, în proiectul cu titlul "*Controlul Coaliţional Distribuit pentru Sisteme Multi-Agent* (CoDiSMA)", finanţat în cadrul proiectului COMPETE 2.0 nr.27PFE/2021 finanţat de Guvernul României, Ministerul Cercetării, Inovării şi Digitalizării, 01/08/2022-31/10/2023, valoare 137000 RON.
3. **Membru** în proiectul de cercetare cu titlul *"Mediu colaborativ pentru dezvoltarea arhitecturilor cloud bazate pe OpenStack cu aplicaţii în CDI*", avand codul SMIS: 124998, , valoarea 2023: 3.720.443,26 RON, Manager proiect prof. dr. ing. mat. Daniel Condurache
4. **Director** în proiectul de cercetare cu titlul "*Strategii coalitionale de control predictiv distribuit pentru sisteme dinamice cuplate* (LEADERS)", finanţat în programul PN III Resurse Umane, subprogramul 1.1 Proiecte de cercetare postdoctorala PD 2019, din UEFISCDI, nr. PD 217/2020, cod proiect PN-III-P1-1.1-PD-2019-0757, 01/09/2020-31/08/2022, valoare: 246010 RON
5. **Membru** în proiectul de cercetare cu titlul *"Controlul optimizat al grupurelor de vehicule automate cooperative* (INTEROPERATE)", nr. TE 190/2021, 01/2021-12/2022, finanţat în competiţia naţională în programul PN III Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea tinerelor echipe independente, al Unităţii Executive pentru Finanţarea Învăţământului Superior, a Cercetării, Dezvoltării şi Inovării (UEFISCDI), 01/2021-12/2022, valoare 520640 RON. director: Conf. dr. ing. Constantin – Florin Căruntu.

6. **Membru** în proiectul de cercetare cu titlul "*Grid platooning by swarm intelligence* (SWARMING)", finanțat de Continental Automotive România, 11/2018-12.2018, director: Prof. dr. ing. Constantin – Florin Căruntu.
7. **Membru** în proiectul de cercetare cu titlul "*Distributed predictive control for wind farms efficiency maximization* (MAX-EOLIAN)", nr. TUIASI-GI-2018-1654, finanțat de TUIASI, după competiția națională în programul PN II Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea tinerelor echipe independente, al Unității Executive pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI), 06/2018-05/2019, valoare 10000 RON. director: Conf. dr. ing. Constantin – Florin Căruntu.
8. **Membru** în proiectul de cercetare cu titlul "*Multi-agent model predictive control for vehicle platooning (IMPROVING)*", finanțat în programul PN II Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea tinerelor echipe independente, din UEFISCDI, nr. 273/01.10.2015, 10/2015-09/2017, valoare: 520640 RON, director: Conf. dr. eng. Constantin – Florin Căruntu

L. Premii, distincții.

1. Articolul cu titlul *"Coalitional Distributed Model Predictive Control Strategy for Vehicle Platooning Applications "* (autori **Maxim A.,** Caruntu C.F.), publicat în Sensors, a fost premiat în 2022 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q2 (în zona galbenă).
2. Articolul cu titlul *"A Coalitional Distributed Model Predictive Control Perspective for a Cyber-Physical Multi-Agent Application"* (autori **Maxim A.,** Caruntu C.F.), publicat în Sensors, a fost premiat în 2021 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q1 (în zona roșie).
3. Articolul cu titlul *"Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework"* (autori Pauca O., **Maxim A.,** Caruntu C.F.), publicat în Sensors, a fost premiat în 2021 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q1 (în zona roșie).
4. Articolul cu titlul *"Distributed Model Predictive Control of Steam/Water Loop in Large Scale Ships "* (autori Zhao S., **Maxim A.**, Liu S., De Keyser R., si Ionescu C. M.,), publicat în Processes, a fost premiat în 2019 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q2 (în zona galbenă).
5. Articolul cu titlul *"An industrially relevant formulation of a distributed model predictive control algorithm based on minimal process information "* (autori **Maxim A.,** Copot D., De Keyser R., și Ionescu C. M), publicat în Journal of Process Control, a fost premiat în 2018 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q1 (în zona roșie).
6. Articolul cu titlul *"Effect of Control Horizon in Model Predictive Control for Steam/Water Loop in Large Scale Ships "* (autori Zhao S., **Maxim A.**, Liu S., De Keyser R., si Ionescu C. M.,), publicat în Processes, a fost premiat în 2018 de Unitatea Executivă pentru

Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q1 (în zona roșie).

M. Alte realizări semnificative.

1. peste 250 citări conform ISI Web of Knowledge (fără autocitări) și peste 500 citări conform Google Scholar (fără autocitări).

Data: 29/09/2025

Grad didactic, Titlu științific, Numele și prenumele: Conf. dr. ing. MAXIM Anca
Semnătura: [redacted]

Nume Prenume: **CARAIMAN Simona**
Gradul didactic: conferentiar
Instituția unde este titular: Universitatea Tehnică „Gheorghe Asachi" din Iași
Facultatea: Automatică și Calculatoare
Departamentul: Calculatoare

Lista de lucrări

Teza de doctorat

Procesare grafică în sisteme de calcul de mare performanţă, Universitatea Tehnică Gheorghe Asachi din Iași, 2010, conducător de doctorat prof. dr. ing. Vasile Manta

Cărţi de autor sau capitole de specialitate în edituri cu ISBN din străinătate

Ci1 S. Caraiman, V. Manta, Image Representation and Processing Using Ternary Quantum Computing, Adaptive and Natural Computing Algorithms, series Lecture Notes in Computer Science, vol. 7824, Springer, Germany (2013)

Ci2 Florentino Fdez-Riverola, Miguel Rocha, Mohd Saberi Mohamad, Simona Caraiman, Ana Belén Gil-González Editors, Practical Applications of Computational Biology and Bioinformatics, 16th International Conference (PACBB 2022), Lecture Notes in Networks and Systems, Vol. 553, 123 pg., 2022, Springer Nature, ISSN 2367-3370.

Cărţi de autor sau capitole de specialitate în edituri cu ISBN din țară

Cn1 C.M. Amarandei, A. Rusan, A. Archip and S. (Caraiman) Aruştei. On the Development of a GRID Infrastructure. In H.N. Teodorescu and M. Craus, editors, Scientific and Educational Grid Applications, pages 13–23, Iasi, Romania, 2008. Politehnium, ISBN 978-973-621-236-9.

Cn2 S. (Caraiman) Aruştei, A. Archip and C.M. Amarandei. Grid Based Visualization Using Sort-Last Parallel Rendering. In H.N. Teodorescu and M. Craus, editors, Scientific and Educational Grid Applications, pages 101–109, Iasi, Romania, 2008. Politehnium, ISBN 978-973-621-236-9.

Cn3 Archip, S. (Caraiman) Aruştei, C.M. Amarandei and A. Rusan. On the design of Higher Order Components to integrate MPI applications in Grid Services. In H.N. Teodorescu and M. Craus, editors, Scientific and Educational Grid Applications, pages 25–35, Iasi, Romania, 2008. Politehnium, ISBN 978-973-621-236-9.

Cn4 N. Botezatu, S. Caraiman, P. Heghelegiu, R. G. Lupu, A. Stan, Travee – Proiectarea arhitecturala, TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie, Editor A. Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014)

Cn5 N. Botezatu, S. Caraiman, P. Heghelegiu, R. G. Lupu, A. Stan, Travee – Studiul alternativelor pentru echipamente si planul de achizitii, TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie, Editor A. Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014)

Cn6 S. Caraiman, Procesare grafică în sisteme de calcul de mare performanță, Performantica, 2015. ISBN 978-606-685-352-1

Cn7 C. Mironeanu, S. Caraiman, Securitatea cibernetică: Provocări și perspective în educație - Growing the Cybersecurity Ecosystem: a Higher Education Perspective, Sitech, 2020. ISBN 978-606-11-7675-5

Articole în reviste cotate ISI şi lucrări în volumele unor manifestări ştiinţifice indexate ISI

articole în reviste cotate ISI:

ISI1 Caraiman S, Manta V, Parallel Simulation of Quantum Search, International Journal Of Computers Communications & Control Volume: 5 Issue: 5 Pages: 634-641 (2010) (IJCCC is indexed in ISI Web of Science, Impact factor 0.650) (cotată ISI)

ISI2 Caraiman, S., Manta, V., Quantum Image Filtering in the Frequency Domain, Advances in Electrical and Computer Engineering, Volume 13, Issue 3, 2013, pages: 77 – 84, ISSN: 1582-7445, e-ISSN: 1844-7600, DOI: 10.4316/AECE.2013.03013, (cotată ISI, Impact Factor: 0.64)

ISI3 Caraiman, S.; Manta, V., Histogram-based segmentation of quantum images,Theoretical Computer Science, Esevier, Volume 529, pp. 46-60, 2014, ISSN: 0304-3975, DOI: 10.1016/j.tcs.2013.08.005, ISI, IF: 0.516, SRI: 1.063

ISI4 Caraiman, S., Manta, V., Image Segmentation on a Quantum Computer, Quantum Information Processing, 2015, DOI 10.1007/s11128-015-0932-1 (ISI, IF: 2.96, SRI: 1.823)

ISI5 Caraiman, S.; Zvoristeanu, O.; Burlacu, A.; Herghelegiu, P. Stereo Vision Based Sensory Substitution for the Visually Impaired. Sensors 2019, 19, 2771. (FI=3.847)

ISI6 Zvorișteanu, O.; Caraiman, S.; Lupu, R.-G.; Botezatu, N.A.; Burlacu, A. Sensory Substitution for the Visually Impaired: A Study on the Usability of the Sound of Vision System in Outdoor Environments. Electronics 2021, 10, 1619. https://doi.org/10.3390/electronics10141619 (FI=2.690)

ISI7 AG Tudorache, V Manta, S Caraiman, Quantum Steganography Using Two Hidden Thresholds, Advances in Electrical and Computer Engineering; Vol. 21, Iss. 4, (2021): 79-88. DOI:10.4316/AECE.2021.04009 (FI=0.825)

ISI8 Tudorache, A.-G.; Manta, V.; Caraiman, S. Quantum Steganography Based on the B92 Quantum Protocol. Mathematics 2022, 10, 2870. https://doi.org/10.3390/math10162870; (FI=2.592)

ISI9 Zvorișteanu, O.; Caraiman, S.; Manta, V.-I. Speeding Up Semantic Instance Segmentation by Using Motion Information. Mathematics 2022, 10, 2365. https://doi.org/10.3390/math10142365; (FI=2.592)

ISI10 Alexandru-Gabriel Tudorache, Vasile Manta, Simona Caraiman, "Integration of a Quantum Voting Scheme into Grayscale Images Using the Novel Enhanced Quantum Representation and Qiskit Framework", Modelling and Simulation in Engineering, vol. 2022, Article ID 8128754, 11 pages, 2022. https://doi.org/10.1155/2022/8128754

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BDI1 C.M. Amarandei, A. Archip, S. (Caraiman) Aruştei, Performance Study for MySql Database Access Within Parallel Applications, Buletinul Institutului Politehnic din Iasi, Automatic Control and Computer Science Section, ISSN 1220 – 2169, LVI(LII), pp. 127–134, 2006.

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Granturi/ proiecte de cercetare câștigate prin competiție

internaționale:

Pi1 Sound of Vision - Natural sense of vision through acoustics and haptics, Horizon 2020, ID 643636, perioada 2015-2017, buget TUIASI 424.709,50 EUR, responsabil TUIASI

Pi2 ORGANZA - Network of Medium Sized Creative Cities, Regional Initiative Project, European Regional Development Fund, INTERREG IVC, period 2010 – 2012, 1.959.881,25 Euro, lead partner: Municipality of Arnhem, Netherlands, http://www.organzanetwork.eu, membru

Pi3 REVERT - taRgeted thErapy for adVanced colorEctal canceR paTients, Horizon 2020 ID 848098, perioada 2020-2023, Buget TUIASI 48.125,00 Euro, membru

Pi4 TrialsNet - TRials supported by Smart Networks beyond 5G, Horizon Europe ID 101095871, perioada 2023-2025, Buget TUIASI 324.375,00 Euro, Membru

naționale:

Pn1 SoV Lite – Substituție Senzorială Audio-Haptică Naturalistă, Accesibilă și Ergonomică pentru Nevăzători, PN-III-P2-2.1-PTE-2019-0810, perioada 2020 - 2022, Buget TUIASI 293.775,00 lei, Coordonator TUIASI

Pn2 SMARTCARE - Platformă Integrativă pentru Soluții de Asistență pentru Autonomie la Domiciliu, PN-III-P2-2.1-PTE-2019-0756, perioada 2020-2022, Buget TUIASI 296.333,00 lei, Coordonator TUIASI

Pn3 TRAVEE - Virtual Therapist with Augmented Feedback for Neuromotor Recovery, RO PN-II-PT-PCCA- 2013-4-1580, perioada 2014-2017, Buget TUIASI - 250.000,00 lei, Membru

Pn4 USMED – Improving medical diagnostic and therapy using an integrated system for clinical and paraclinical data, ERDF, perioada 2014-2015, Buget TUIASI - 147.157,00 lei, Membru.

Pn5 Classical and quantum models for the gauge fields, CNCSIS ID, perioada 2007-2010, Buget TUIASI 150.000 Euro, Membru

Pn6 Academic grid for complex applications (GRAI), CEEX, perioada 2006 – 2008, Buget TUIASI 420.000,00 Euro, http://www.grai.tuiasi.ro, Mmebru

Pn7 Intelligent systems and methods for optimization, monitoring and control of district heating networks (SISTERMO), CEEX, perioada 2006 – 2008, Buget TUIASI 330.000 Euro, http://www.sistermo.tuiasi.ro, Membru

Pn8 Quantum computation models. Implementation of quantum algorithms in QCL, CNCSIS A, perioada 2006-2007, Membru

Pn9 PREVENT - Sistem Integrat de Prevenire a Propagarii Infectiilor Intraspitalicesti, PN III PTE nr. 24 PTE/2020, perioada 2020-2022, Buget TUIASI - 246.793,00 lei, Membru

Pn10 MRCA - Cooperative navigation of mobile robots în complex applications, PN III RU-TE 32/2018, perioada 2018-2020, Buget TUIASI 420.000,00 lei, Membru

Pn11 TRAVEE - Terapeut Virtual prin Feedback Augmentat pentru Recuperare Neuromotorie, PN-III-P2-2.1-PTE-2021-0634, perioada 2022-2024, buget TUIASI - 248.031,00 lei, Membru

Contracte cu agenți economici

Pe1 Dezvoltarea unui sistem inovativ de recunoastere a tiparelor materialelor pentru imbunatatirea proceselor de taiere in industria textila, contract de cercetare nr. 22586/19.10.2018, Ag. Ec. S.C. GeminiCad Systems S.R.L., Iasi, Coordonator

Granturi/proiecte de dezvoltare instituțională, dezvoltare infrastructuri CDI, acțiuni de coordonare și suport

internaționale:

Pi5 Winet@Uni - Joint Cross-Border Networking Infrastructure of Technical Universities of Iasi and Moldova, Joint Operational Programme Romania-Republic of Moldova 2014-2020, perioada 2019-2023, Buget total proiect 1.991.415,00 Euro, Buget TUIASI 1.071.030,00 Euro, Coordonator consortiu

Pi6 eDIH-DIZ- DIGITAL INNOVATION ZONE EDIH - MANUFACTURING & SMART HEALTH for better business, life and health in the North East Romania region, Digital Europe + PCDIF, perioada 2022-2025, Buget total proiect 3.755.922,97 Euro, Buget TUIASI 1.300.214,12 Euro, Coordonator consortiu

Pi7 RoNaQCI - Romanian National Quantum Communication Infrastructure, Digital Europe ID 101091562, perioada 2023-2025, Buget TUIASI 143.454,90 Euro, Responsabil stiintific TUIASI

Pi8 HIZ - Health Innovation Zone, Horizon Europe - EIT Health DRIVE, perioada 2023, Buget proiect 71.550,00 Euro, Responsabil TUIASI

Pi9 BrainTwin - Development of a World-Level Neuroengineering Research Centre by European Twinning, Horizon 2020 ID 952378, perioada 2020-2023, Buget TUIASI 271.250,00 euro, Membru

Pi10 INGENIUM Alliance of European Universities, Erasmus European Universities, perioada 2023-2026, buget TUIASI 1.117.924,00 Euro, Coordonator TUIASI-WP3

Pi11 BI4E - Boosting Ingenium for Excellence, Horizon Europe ID 101071321, perioada 2022-2025, Buget TUIASI 230.375,00, Coordonator TUIASI-WP2

naționale:

Pn12 Elearn4All - Dezvoltarea infrastructurii TIC a TUIASI pentru sustinerea e-learning si a educatiei mixte, PROGRAMUL OPERAȚIONAL COMPETITIVITATE SMIS 149875, perioada 2021-2023, Buget proiect 7.316.252,99 lei, Coordonator

Pn13 DigitAll@TUIASI - Transformare digitală pentru profesiile viitorului, PNRR-Componenta 15-Investitia 16, perioada 2022-2025, Buget proiect 27.567.039,00 lei, Manager operațional

Pn14 COMPETE 2.0 - Dezvoltarea instituțională a TUIASI prin creșterea performanței în cercetare, dezvoltare și inovare, PNCDI III - 27PFE/2021, Buget TUIASI , Membru

Pn15 ACCESS@TUIASI - Informația la un click distanță în procesul didactic și de instruire aplicată, CNFIS-FDI-2021-0577, perioada 2021, Buget TUIASI 360.000,00 lei, Coordonator

Pn16 VIRTUAL-LAB@TUIASI: Soluții de migrare a activităților practice în mediul virtual cu acces online, CNFIS-FDI-2022-0649, perioada 2022, Buget TUIASI 360.000,00 lei, Coordonator

Pn17 DIGITAL@TUIASI: Optimizarea infrastructurii Wireless TUIASI prin prisma asigurării accesului la Internet of Things în cadrul procesului didactic și de cercetare, CNFIS-FDI-2023-F-0666, perioada 2023, Buget TUIASI 340.000,00 lei

Data: 25.09.2025

Nume și prenume, semnătura
Caraiman Simona

Anexa II.09.b – Lista de lucrări

Lista de lucrări

Numele şi prenumele: **Andrei Stan**

A. Teza de doctorat

- *Contribuții în proiectarea unităților centrale utilizate în arhitecturi de calcul dedicate*, Universitatea Tehnică Gheorghe Asachi din Iași, 2012, coordonator prof.dr.ing. Alexandru Valachi.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Robert G Lupu, Andrei Stan, Florina Ungureanu, Patient Monitoring: Wearable Device for Patient Monitoring, Advances in Electrical Engineering and Computational Science Vol.39, Gelman, Len (Ed.) , Springer Netherlands 2009, pp. 659-668, ISBN 978-90-481-2311-7, http://link.springer.com/chapter/10.1007%2F978-90-481-2311-7_56
2. A. Stan, R. Lupu, M. Ciorap, R. Ciorap, Biosignal Monitoring and Processing for Management of Hypertension, XII Mediterranean Conference on Medical and Biological Engineering and Computing 2010, vol. 29, pp. 537-540, Springer berlin HeidelbergISBN 978-3-642-13038-0, http://link.springer.com/chapter/10.1007%2F978-3-642-13039-7_135

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Nicolae Botezatu, Simona Caraiman, Paul Herghelegiu, Robert Gabriel Lupu, Andrei Stan, TRAVEE - studiul alternativelor pentru echipamente și planul de achiziții, TRAVEE - studiu de caz - inițierea unei cercetări ICT în recuperarea neuromotorie, Editura Printech 2014,pp.155-194, ISBN 978-606-23-0349-5, pagini: 40
2. Nicolae Botezatu, Simona Caraiman, Paul Herghelegiu, Robert Gabriel Lupu, Andrei Stan, TRAVEE - Proiectare arhitecturală, TRAVEE - studiu de caz - inițierea unei cercetări ICT în recuperarea neuromotorie, Editura Printech 2014, pp. 85-122, ISBN 978-606-23-0349-5, pagini: 38
3. A. Stan, Sisteme de calcul dedicate – elemente de proiectare, Ed. Performantica, ISBN 978-606-685-442-9, Iași, 2016 (120 pagini)
4. Al. Bârleanu, A. Stan, Sistem de dezvoltare cu microcontroler-ul 80C31, Ed. Performantica, ISBN 973-8048-35-4 Iaşi, 2003 (238 pagini)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Stan Andrei, Arhitectura sistemelor de calcul. Aplicații Verilog pentru modelarea sistemelor digitale complexe și a microprocesoarelor. Programare în limbaj de asamblare edu.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date Internaţionale.

F1 - lucrări ISI

1. Popovici, C.-A.; Stan, A.; Botezatu, N.-A.; Manta, V.-I. RiscADA: RISC-V Extension for Optimized Control of External D/A and A/D Converters. Electronics 2025, 14, 3152. https://doi.org/10.3390/electronics14153152
2. Axinte, C.-T.; Stan, A.; Manta, V.-I. Embedded Streaming Hardware Accelerators Interconnect Architectures and Latency Evaluation. Electronics 2025, 14, 1513. https://doi.org/10.3390/electronics14081513
3. Popovici, Cosmin-Andrei, and Andrei Stan. "Real-Time RISC-V-Based CAN-FD Bus Diagnosis Tool." Micromachines 14, no. 1 (January 12, 2023): 196. https://doi.org/10.3390/mi14010196
4. Robert-Gabriel Lupu, Oana Mitruț, Andrei Stan, Florina Ungureanu, Kyriaki Kalimeri, Alin Moldoveanu, Cognitive and Affective Assessment of Navigation and Mobility Tasks for the Visually Impaired via Electroencephalography and Behavioral Signals, Sensors 2020, 20(20), 5821; https://doi.org/10.3390/s20205821
5. F Ungureanu, RG Lupu, A Stan, I Craciun, C Teodosiu, TOWARDS REAL TIME MONITORING OF WATER QUALITY IN RIVER BASINS., Environmental Engineering & Management Journal (EEMJ) 9 (9), 2010, http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol9/no9/24_249_Ungureanu.pdf
6. Al. Bârleanu, V. Baitoiu, A. Stan, Digital filter optimization for C language, Advances in Electrical and Computer Engineering, Pages: 111 - 114, Volume 11, Number 3, 2011, ISSN: 1582-7445 http://www.aece.ro/abstractplus.php?year=2011&number=3&article=18

F2 - lucrări BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

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2. Mihai Grigore Timis, Alexandru Valachi, Alexandru Barleanu, Andrei Stan, Logical Function Decomposition Method for Synthesis of Digital Logical System Implemented with Programmable Logic Devices (PLD), Journal of Circuits and Systems, Scientific

Research Publishing, Vol. 4, Nr. 7, pg. PP. 472-477, 2013 http://www.scirp.org/journal/PaperInformation.aspx?PaperID=39252

3. Mihai Grigore Timis, Alexandru Valachi, Alexandru Barleanu, Andrei Stan, Two Analytical Methods for Detection and Elimination of the Static Hazard in Combinational Logic Circuits, Vol. 4, Nr. 7, PP. 466-471, 2013 http://www.scirp.org/journal/PaperInformation.aspx?PaperID=39251
4. Cosmin Gabriel Popa and Andrei Stan, A Framework Architecture for Easily Designing Applications in Dynamically Partially Reconfigurable Systems, Buletinul Institutului Politehnic din Iaşi, Automatic Control and Computer Science Section (secţiunea "Automatic Control and Computer Science Section" este încadrată la categoria CNCSIS B+ şi este indexată Zentralblatt, DOAJ), Tomul LVII (LXI) Fasc. 2, 2011 http://www.ace.tuiasi.ro/users/103/f2_2011_5_(53-68)_Popa.pdf
5. C. Popa, A. Stan, Mach Speed Processing. Dynamic Cloning of Software Functionality in Hardware, Buletinul Institutului Politehnic din Iaşi, Automatic Control and Computer Science Section (secţiunea "Automatic Control and Computer Science Section" este încadrată la categoria CNCSIS B+ şi este indexată Zentralblatt, DOAJ), Tomul LVI(LX), Fasc. 2, 2010 http://www.ace.tuiasi.ro/users/103/Abstract_fasc2_2010_link.pdf
6. Nicolae Alexandru Botezatu, Vasile Ion Manta and Andrei Stan, Self-Adaptable Security Architecture for Power-Aware Embedded Systems, Buletinul Institutului Politehnic din Iaşi, Automatic Control and Computer Science Section (secţiunea "Automatic Control and Computer Science Section" este încadrată la categoria CNCSIS B+ şi este indexată Zentralblatt, DOAJ), Tomul LVI (LX) Fasc. 3, 2010 http://www12.tuiasi.ro/users/103/4_F3_10_Botezatu.pdf
7. Andrei Stan, Nicolae Botezatu, Lucian Panduru and Robert Gabriel Lupu, A Finite State Machine Model Used in Embedded Systems Software Development, Buletinul Institutului Politehnic din Iaşi Tome LV (LIX) Fasc. 2, 2009 AUTOMATIC CONTROL and COMPUTER SCIENCE Section, http://www.ace.tuiasi.ro/users/103/Bind4.pdf
8. N. Botezatu, A. Stan, Low Power Embedded System Used In Healthcare Systems, Buletinul Institutului Politehnic din Iaşi, Automatic Control and Computer Science Section (secţiunea "Automatic Control and Computer Science Section" este încadrată la categoria CNCSIS B+ şi este indexată Zentralblatt, DOAJ), Tomul LV(LIX), Fasc. 1, 2009 http://www.ace.tuiasi.ro/users/103/Binder3.pdf
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10. P. Caşcaval, R. Silion, A. Stan, MARCHS2C: A Test for All Static 2-Cell RAM Coupling Faults, Buletinul Institutului Politehnic din Iaşi, Automatic Control and Computer Science Section (secţiunea "Automatic Control and Computer Science Section" este încadrată la categoria CNCSIS B+ şi este indexată Zentralblatt, DOAJ), Tomul LII (LVI), Fasc. 1 – 4, 2006 http://www.ace.tuiasi.ro/users/103/Abstract_2006.pdf

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I1 - lucrări ISI

1. C. -A. Popovici, A. Stan and V. -I. Manta, "RiscDaqExt – Digital Acquisition and Control RISC-V Extension," 2024 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2024, pp. 582-587, doi: 10.1109/ICSTCC62912.2024.10744648.
2. F. Ungureanu, R. G. Lupu, S. Caraiman and A. Stan, "A Framework to Assess Cortical Activity of Visually Impaired Persons during Training with a Sensory Substitution Device," 2017 21st International Conference on Control Systems and Computer Science (CSCS), Bucharest, 2017, pp. 199-206., doi: 10.1109/CSCS.2017.34 https://ieeexplore.ieee.org/abstract/document/7968562
3. Robert Gabriel Lupu, Florina Ungureanu, Andrei Stan, A Virtual Reality System for Post Stroke Recovery , 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2016 https://ieeexplore.ieee.org/abstract/document/7790682
4. Adrian Alexandrescu, Andrei Stan, Nicolae Botezatu, Simona Caraiman, Real-time inter-process communication in heterogeneous programming environments, 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2016 https://ieeexplore.ieee.org/abstract/document/7790679
5. Caraiman, Simona; Stan, Andrei; Botezatu, Nicolae; et al., Architectural design of a real-time augmented feedback system for neuromotor rehabilitation, 20th International Conference on System Controls and Computer Science 2015 Location: Univ Politehnica Bucharest, Bucharest, ROMANIA Date: MAY 27-29, 2015 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=N1Nr3tfupoTZKNQFGu3&page=1&doc=1
6. Stan, Andrei; Botezatu, Nicolae; Lupu, Robert Gabriel, The design of a scalable haptic system used for impaired people assistance, 20th International Conference on System Controls and Computer Science 2015 Location: Univ Politehnica Bucharest, Bucharest, ROMANIA Date: MAY 27-29, 2015 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=N1Nr3tfupoTZKNQFGu3&page=1&doc=2
7. Stan, Andrei; Irimia, Danut Constantin; Botezatu, Nicolae Alexandru; et al., Controlling a Hand Orthosis by Means of P300-Based Brain Computer Interface, E-Health And Bioengineering Conference (EHB) Location: Iasi, ROMANIA Date: NOV 19-21, 2015 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=N1Nr3tfupoTZKNQFGu3&page=1&doc=3
8. Stan, Andrei; Botezatu, Nicolae; Introducing aceMote: an energy efficient 32 bit mote; INTERNATIONAL CONFERENCE ON DEVELOPMENT AND APPLICATION SYSTEMS (DAS), Suceava, Romania, Date: MAY 15-17, 2014 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=N1Nr3tfupoTZKNQFGu3&page=1&doc=7
9. Botezatu, Nicolae; Lupu, Robert; Stan, Andrei; Energy-aware Routing for e-Health Wireless Sensor Networks; 4th IEEE International Conference on E-Health and Bioengineering (EHB) Location: Iasi, ROMANIA Date: NOV 21-23, 2013 http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=2&SID=P2TQ4G182CwrFrF9fAf&page=1&doc=5
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11. Stan, Andrei; Botezatu, Nicolae; Vieriu, George, THE DESIGN OF A FINITE STATE MACHINE ENGINE WITH SAFE OPERATION USED IN EMBEDDED SYSTEMS DESIGN, 19th International Symposium of the Danube-Adria-Association-for-Automation-and-Manufacturing Location: Trnava, SLOVAKIA Date: OCT 22-25, 2008 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=N1Nr3tfupoTZKNQFGu3&page=2&doc=13
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I2 - lucrări BDI

1. Uleru, George-Iulian, Vasile Ion Manta, and Andrei Stan. "Enhanced Hardware Shifting Priority Queue Architecture with Reduced Switching Activity." In 2020 24th International Conference on System Theory, Control and Computing (ICSTCC), 685–90. Sinaia, Romania: IEEE, 2020. https://doi.org/10.1109/ICSTCC50638.2020.9259738, https://ieeexplore.ieee.org/abstract/document/9259738
2. Achirei, Stefan Daniel, Otilia Zvoristeanu, Adrian Alexandrescu, Nicolae Alexandru Botezatu, Andrei Stan, Cristian Rotariu, Robert Gabriel Lupu, and Simona Caraiman. "SMARTCARE: On the Design of an IoT Based Solution for Assisted Living." In 2020 International Conference on E-Health and Bioengineering (EHB), 1–4. IASI: IEEE, 2020. https://doi.org/10.1109/EHB50910.2020.9280185, https://ieeexplore.ieee.org/abstract/document/9280185
3. Achirei, Stefan Danie, Otilia Zvoristeanu, Adrian Alexandrescu, Nicolae Alexandru Botezatu, Andrei Stan, Cristian Rotariu, Robert Gabriel Lupu, and Simona Caraiman. "Remote Monitoring of Physiological Parameters Used in Ambient Assistive Technologies." In 2020 International Conference on E-Health and Bioengineering (EHB), 1–4. IASI: IEEE, 2020. https://doi.org/10.1109/EHB50910.2020.9280249, https://ieeexplore.ieee.org/abstract/document/9280249
4. O. Bălan, M.-Iu. Dascălu, A. Moldoveanu, S. Caraiman, F. Ungureanu, R. Lupu, A. Stan, "Brain activation during virtual and real-world mobility tasks with single and multimodal sensory input provided by an assistive navigational device for visually impaired people," 2018 25th Saint Petersburg International Conference on Integrated Navigation Systems (ICINS), St. Petersburg, 2018, pp. 1-6., doi: 10.23919/ICINS.2018.8405870 https://ieeexplore.ieee.org/abstract/document/8405870

5. Oana Bălan, Alin Moldoveanu, Hunor Nagy, György Wersényi, Nicolae Botezatu, Andrei Stan, Robert-Gabriel Lupu, Haptic-auditory perceptual feedback based training for improving the spatial acoustic resolution of the visually impaired people, 21st International Conference on Auditory Display (ICAD2015), July 6-10, 2015, Graz, Styria, Austria https://smartech.gatech.edu/handle/1853/54096
6. Botezatu, N. Stan, A. and Ungureanu, F., Energy-efficient compression algorithms for wireless transmission of physiological data. In: Proceeedings of the 18th International Conference on System Theory, Control and Computing (ICSTCC), 2014, Iași, pp. 580-584 http://ieeexplore.ieee.org/document/6982479/
7. Barleanu, A., Baitoiu, V. ; Stan, A., Solenoid-operated valve control under adverse mechanical conditions such as vibrations or shocks, 16th International Conference on System Theory, Control and Computing (ICSTCC), 2012 http://ieeexplore.ieee.org/document/6379258/
8. Vieriu, G.E., Stan, A., State of charge estimates for LiIon batteries using bq27541 fuel gauge in ireless sensor networks, 23rd DAAAM International Symposium on Intelligent Manufacturing and Automation 2012 http://www.daaam.info/Downloads/Pdfs/proceedings/proceedings_2012/0513_Vieriu&Stan.pdf
9. C Popa, A Stan, A self-healing single core architecture using dynamically reconfigurable devices, 16th International Conference on System Theory, Control and Computing (ICSTCC), 2012 http://ieeexplore.ieee.org/document/6379222/
10. Al. Bârleanu, V. Baitoiu, A. Stan, Floating-point to fixed-point code conversion with variable trade-off between computational complexity and accuracy loss, 15th International Conference on System Theory and Control, October 14-16, 2011, Sinaia, Romania http://ieeexplore.ieee.org/document/6085687/
11. A. Stan, Al. Valachi, Al. Bârleanu, The design of a run-time monitoring structure for a MPSoC, 15th International Conference on System Theory, Control and Computing, October 14-16, 2011, Sinaia, Romania http://ieeexplore.ieee.org/document/6085717/
12. N. Botezatu, V. Manta, A. Stan, Self Adaptable Architecture for Power-Aware Embedded Systems, 14th International Conference on System Theory and Control, October 17-19, 2010, Sinaia, Romania http://www12.tuiasi.ro/users/103/4_F3_10_Botezatu.pdf

J. Invenții

K. Contracte de cercetare/granturi

1. Responsabil UTI proiect tip HORIZON-KDT-JU-2022-1-IA; Număr: 101112274; Acronim: ISOLDE; Denumire completă: High Performance, Safe, Secure, Open-Source Leveraged RISC-V Domain-Specific Ecosystems, perioada 1.05.2023 - 30.04.2026, buget 372375 EUR.
2. Membru - proiect PN-III-P2-2.1-PTE-2019-0756 Platformă integrativă pentru soluții de asistență pentru autonomie la domiciliu - SMARTCARE
3. Responsabil logistic în cadrul proiectului - Natural sense of vision through acoustics and haptics, grant H2020, Nr. 643636, perioada 01.01.2015 -31.12.2017, buget 349709,50 Euro, Responsabil UTI, prof.dr.ing. Vasile Manta

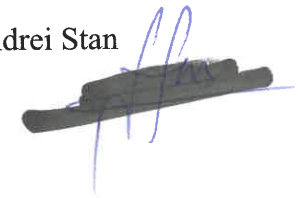
4. Membru în cadrul proiectului Terapeut Virtual prin Feedback Augmentat pentru Recuperare Neuromotorie" - TRAVEE, PNCDI-2, 1-2014 – 2016
5. Membru în cadrul proiectului - „Soluţie integrată e-health de monitorizare a parametrilor vitali la pacienţii cu afecţiuni cronice - SIMPA", Contract tip PNCDI II, nr. 11-070/2007 - 2010, responsabil prof.dr.ing. Ungureanu Florina
6. Membru în cadrul proiectului PNII 11-067/18.09.2007 Sistem integrat de telemonitorizare în timp real a pacienţilor şi persoanelor în vârstă
7. Membru în cadrul proiectului CNCSIS type A, code 231, 2006-2007, RAM memory tests for coupling static and dynamic faults. membru în echipa de cercetare
8. Membru în cadrul proiectului 56 – CEEX II03/27.07.2006 Sistem pentru terapia personalizată a tulburărilor de expresie lingvistică, membru în echipa de cercetare
9. Membru în cadrul proiectului 131 – CEEX II02/02.10.2006 Interacţiunea gestuală cu sistemele informatice şi robotice, membru în echipa de cercetare

L. Premii, distincţii

M. Alte realizări semnificative

Data: 28/09/2025

Conf. dr. ing. Andrei Stan



ANEXA 5.1

Universitatea Tehnică Gheorghe Asachi din Iaşi
Facultatea de Automatică şi Calculatoare
Departamentul Calculatoare
Conferenţiar univ, dr. ing. Herghelegiu Paul-Corneliu

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Analiza şi vizualizarea seturilor de date biomedicale, îndrumător prof.dr.ing Vasile Manta, domeniul Calculatoare şi Tehnologia Informaţiei, susţinută în noiembrie 2011.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. N. Botezatu, S. Caraiman, **P. Heghelegiu**, R. G. Lupu, A. Stan, Travee – Proiectarea arhitecturala, TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie, Editor A. Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014), pp. 85-122

2. N. Botezatu, S. Caraiman, **P. Heghelegiu**, R. G. Lupu, A. Stan, Travee – Studiul alternativelor pentru echipamente si planul de achizitii, TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie, Editor A. Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014), pp. 155-192

3. Adrian Cotîrleţ, A. Zală, Nicolae Botezatu, Robert Lupu, Elena Şerban, Alexandru Archip, **Paul Herghelegiu**, Monitorizarea la distanţă a parametrilor vitali, Coordonator Adrian Cotîrleţ, Editura Alma Mater, Bacau, ISBN 978-606-527-511-9 (2015), 154 pagini

4. **Paul-Corneliu Herghelegiu**, Elemente de programare orientată pe obiecte în C++, editura Performantica, Iaşi, 2023, ISBN 978-630-328-027-1, 130 pagini

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Simona Caraiman, Andrei Stan, Nicolae Botezatu, Paul Herghelegiu, Robert Gabriel Lupu, Alin Moldoveanu. Architectural Design of a Real-Time Augmented Feedback System for Neuromotor Rehabilitation. 20th International Conference on Control Systems and Computer Science. 2015
2. Alexandru Archip, Nicolae Botezatu, Elena Şerban, Paul-Corneliu Herghelegiu, Andrei Zală, An IoT based system for remote patient monitoring, 2016 17th International Carpathian Control Conference (ICCC), 2016
3. Herghelegiu Paul-Corneliu, Burlacu Adrian, Caraiman Simona, Robust Ground Plane Detection and Tracking in Stereo Sequences Using Camera Orientation, 20th International Conference on System Theory, Control and Computing, 2016
4. Burlacu Adrian, Bostaca Simona, Hector Ioana, Herghelegiu Paul-Corneliu, Ivanica, Gabriel, Moldoveanu Alin, Caraiman Simona, Obstacle Detection in Stereo Sequences Using Multiple

Representations of the Disparity Map, 20th International Conference on System Theory, Control and Computing, 2016

5. Simona Caraiman, Anca Morar, Mateusz Owczarek, Adrian Burlacu, Dariusz Rzeszotarski, Nicolae Botezatu, Paul Herghelegiu, Florica Moldoveanu, Pawel Strumillo, Alin Moldoveanu 2017, Computer Vision Workshop (ICCVW), 2017 IEEE International Conference on
6. Paul Herghelegiu, Adrian Burlacu, Simona Caraiman, System Theory, Control and Computing (ICSTCC), 2017 21st International Conference on, 2017
7. Robert Gabriel Lupu, Paul Herghelegiu, Nicolae Botezatu, Alin Moldoveanu, Oana Ferche, Catalin Ilie, Ana-Maria Levinta, System Theory, Control and Computing (ICSTCC), 2017 21st International Conference on, 2017
8. Archip, C. Amarandei, P. Herghelegiu, C. Mironeanu and E. Serban, "RESTful Web Services – A Question of Standards," 2018 22nd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, 2018, pp. 677-682. doi: 10.1109/ICSTCC.2018.8540763
9. Simona Caraiman, Otilia Zvoristeanu, Adrian Burlacu, Paul Herghelegiu, Stereo Vision Based Sensory Substitution for the Visually Impaired, Sensors, 2019, https://doi.org/10.3390/s19122771
10. Vlad Ghizdovat, Lucian Nita, Paul Herghelegiu, Simona Caraiman, Alina Capitanu, Carmeni Mihai, Cati Stolniceanu, Jalloul Wael, Delia Ciobanu, Lidia Ionescu, Irena-Cristina Grierosu, Cipriana Stefanescu, USMED and Surgery Assist: IMAGO MOL Cluster Biomedical Solutions to Improve Patient Imaging Availability and Noninvasive Diagnosis, 2019 E-Health and Bioengineering Conference (EHB), 2019, doi: 10.1109/EHB47216.2019.8970031
11. Artene, CG; Caraiman, S; Burlacu, A; Herghelegiu, P. Ground plane detection for wearable assistive devices for the visually impaired. 2021 25th International Conference On System Theory, Control And Computing (ICSTCC), Page81-86, 2021
12. Ianole, V.; Danciu, M.; Volovat, C.; Stefanescu, C.; Herghelegiu, P.-C.; Leon, F.; Iftene, A.; Cusmuliuc, C.-G.; Toma, B.; Drug, V.; Ciobanu Apostol, D.G. Is High Expression of Claudin-7 in Advanced Colorectal Carcinoma Associated with a Poor Survival Rate? A Comparative Statistical and Artificial Intelligence Study. Cancers 2022, 14, 2915. https://doi.org/10.3390/cancers14122915
13. Volovat, S.-R.; Augustin, I.; Zob, D.; Boboc, D.; Amurariti, F.; Volovat, C.; Stefanescu, C.; Stolniceanu, C.R.; Ciocoiu, M.; Dumitras, E.A.; Danciu, M.; Apostol, D.G.C.; Drug, V.; Shurbaji, S.A.; Coca, L.-G.; Leon, F.; Iftene, A.; Herghelegiu, P.-C. Use of Personalized Biomarkers in Metastatic Colorectal Cancer and the Impact of AI. Cancers 2022, 14, 4834. https://doi.org/10.3390/cancers14194834
14. Beti, Iosif-Alin, Paul-Corneliu Herghelegiu, and Constantin-Florin Caruntu. 2024. "Architectural Framework to Enhance Image-Based Vehicle Positioning for Advanced Functionalities" *Information* 15, no. 6: 323. https://doi.org/10.3390/info15060323
15. I. -A. Beti, P. -C. Herghelegiu, C. -M. Amarandei and C. -F. Caruntu, "Cloud Architectural Design for Image-based Vehicle Positioning in Traffic Management," *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)*, Sinaia, Romania, 2024, pp. 217-222, doi: 10.1109/ICSTCC62912.2024.10744705

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Selecţie cu maximum 20 lucrări în volume de conferinţe

E. Brevete obţinute în întreaga activitate

Data: 04.12.2024 **Semnătura:**

E – Brevete (pentru întreaga activitate)

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Botezatu Nicolae-Alexandru

A. Teza de doctorat.
Domeniu: Calculatoare şi tehnologia informaţiei
Titlu: Optimizarea consumului de energie în procesul de securizare al sistemelor încorporate
Conducător:Prof.univ.dr.ing. Vasile-Ion Manta
Instituţia de învăţământ: Universitatea Tehnică „Gheorghe Asachi" din Iaşi

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

Nicolae-Alexandru Botezatu, *Rețele de calculatoare. Elemente de programare în limbajul Python*, Performantica, Iași, ISBN 978-630-328-140-7 (2025)

Nicolae Botezatu, Simona Caraiman, Paul Heghelegiu, Robert Gabriel Lupu, Andrei Stan, Capitol Proiectarea arhitecturala, *TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie*, Editor Alin Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014) , pp. 85-122

Nicolae Botezatu, Simona Caraiman, Paul Heghelegiu, Robert Gabriel Lupu, Andrei Stan, Capitol Studiul alternativelor pentru echipamente si planul de achizitii, *TRAVEE - studiu de caz - initierea unei cercetari ICT in recuperarea neuromotorie*, Editor Alin Moldoveanu, Printech, Bucuresti, ISBN 978-606-23-0349-5 (2014), pp. 155-192

Adrian Cotârleț, Andrei Zală, Valentin Nedeff, Daniel Dobreci, Elena Nechita, **Nicolae Botezatu**, Robert Lupu, Elena Șerban, Alexandru Archip, Paul Herghelegiu, *Monitorizarea la distanță a parametrilor vitali*, Alma Mater, Bacău, ISBN 978-606-527-511-9 (2015)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

În reviste cotate ISI:

Otilia Zvorișteanu, Simona Caraiman, Robert-Gabriel Lupu, **Nicolae Alexandru Botezatu,** Adrian Burlacu, *Sensory Substitution for the Visually Impaired: A Study on the Usability of the Sound of Vision System in Outdoor Environments.* Electronics. 2021; 10(14):1619. https://doi.org/10.3390/electronics10141619 (Impact Factor 2021: 2.69 - Q2)

Popovici, Cosmin-Andrei, Andrei Stan, **Nicolae-Alexandru Botezatu**, and Vasile-Ion Manta. 2025. "RiscADA: RISC-V Extension for Optimized Control of External D/A and A/D Converters" *Electronics* 14, no. 15: 3152. https://doi.org/10.3390/electronics14153152

În reviste indexate în baze de date internaţionale (BDI):

Chiranjib Patra, **Nicolae Botezatu**, *Improving the Performance of Hierarchical Clustering Protocols with Network Evolution Model*, Advances in Intelligent Systems and Computing, vol. 765, pp. 82-95, Springer, Cham. https://doi.org/10.1007/978-3-319-91192-2_9 (SCOPUS)

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

Adrian Alexandrescu, **Nicolae Botezatu** and Robert Lupu, *Monitoring and processing of physiological and domotics parameters in an Internet of Things (IoT) assistive living environment,* 2022 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2022, pp. 362-367, https://doi.org/10.1109/ICSTCC55426.2022.9931865

Nicolae Botezatu, Adrian Alexandrescu, Simona Caraiman, Florina Ungureanu and Robert Lupu, *Sensing Architecture for a Nosocomial Infection Tracing System*, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), Iasi, Romania, 2021, pp. 378-383, https://doi.org/10.1109/ICSTCC52150.2021.9607207

Otilia Zvoristeanu, Ștefan Daniel Achirei, **Nicolae Alexandru Botezatu**, Robert-Gabriel Lupu, Adrian Burlacu and Simona Caraiman, *On Improving Perception for Visually Impaired: Requirements, Research and Practicality*, 2020 International Conference on e-Health and Bioengineering (EHB), Iasi, Romania, 2020, pp. 1-4, https://doi.org/10.1109/EHB50910.2020.9280265

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J. Invenţii.

K. Contracte de cercetare/granturi.

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Natural sense of vision through acoustics and haptics - Sound of Vision - SOV. H2020-P5-PHC-2014 643636, 1911193 RON, 2015-2017, 20 membri
Romanian National Quantum Communication Infrastructure (RoNaQCI), DIGITAL-2021-QCI-01, nr. 101091562, 143454.90 RON, 2023-2025, 10 membri, **responsabil software**
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Terapeut Virtual prin Feedback Augmentat pentru Recuperare Neuromotorie – TRAVEE, PN-III-P2-2.1-PTE-2021-0634, 295000 RON, 2022-2024, 7 membri
Mediu colaborativ pentru dezvoltarea arhitecturilor cloud bazate pe OpenStack cu aplicatii in CDI, POC/395/390071/ 124998/CLOUD, 5048822.88 RON, 2021-2022, 26 membri
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Platforma integrativa pentru solutii de asistenta pentru autonomie la domiciliu – SMARTCARE, PN-III-P2-2.1-PTE-2019-0810, 296333 RON, 2020-2021, 7 membri
Sistem Integrat de Prevenire a Propagarii Infectiilor Intraspitalicesti – PREVENT, PN-III-P2-2.1-PTE-2019-0769, 246793 RON, 2020-2021, 6 membri
Navigarea robotilor mobili cooperativi in aplicatii complexe (MRCA), PN-III-P1-1.1-TE-2016-0737, 369000 RON, 2019-2020, 5 membri
Sistem de monitorizare si asistenta pentru persoanele cu nevoi speciale (SIMAPS), POS CCE, nr. 19759/18.11.2014, 118217 RON, 2014-2015, 5 membri
Terapeut Virtual prin Feedback Augmentat pentru Recuperare Neuromotorie, PN II Parteneriate 1/2014, 296683 RON, 2014-2017, 8 membri
Solutie integrata e-health de monitorizare a parametrilor vitali la pacientii cu afectiuni cornice, PN II SIMPA 11-070/2007, 189270 RON, 2008-2009, 9 membri

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 29/09/2025

Anexa II.09.b-Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență
Ingineria sistemelor

Numele şi prenumele: CIOBANU IULIA BRÎNDUŞA

A. Teza de doctorat:

Interacţiunea câmp gravitaţional-câmp electromagnetic, conducător ştiinţific Prof. dr. fiz. Corneliu Ciubotariu, Universitatea "Al. I. Cuza" Iaşi, Facultatea de Fizică, Ordinul Ministrului Educaţiei Naţionale Nr. 3774 din 10.V.2000.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

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C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

1. Iulia Brîndușa Ciobanu (coautor), *Experimentează, învaţă, descoperă, Îndrumar de laborator Fizică,* Editura Performantica, Iaşi, ISBN 978-630-328-164-3, 245 pag., 2025.
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5. Gabriela Apreotesei, **Iulia Brîndușa Ciobanu**, *Fizica pentru învățământul tehnic superior. Teorie și aplicații,* Editura PIM, Iași, ISBN 978-606-13-6500-5, 405 pag., 2021.

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2. Iulia Brînduşa Ciobanu, *Laboratoare, http://www.phys.tuiasi.ro* → Studenţi → Facultatea de Automatică şi Calculatoare, reactualizat 2025.

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4. Iulia Brîndușa Ciobanu, *Suport de studiu – Testare interactivă on-line în Macromedia Flash*, www.iulia-physics.ro , reactualizat 2025.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

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4. Brîndușa Ciobanu, Irina Radinschi, *Modeling the Electric and Magnetic Fields in a Rotating Universe,* Rom. Journal of Physics, ISSN 1221-146X, Vol. 53, Nos. 1-2., pp. 405-415, 2008.

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9. I. Radinschi, L. Scripcaru, **B. Ciobanu**, M. Frunza, *Online Qiuzzes an Application of PHPTriad and MySQL*, Rom. Journal of Physics, ISSN 1221-146X, Vol. 53, Nos. 1-2. pp. 423-427, 2008.

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11. Daniela Ionescu, **Brîndușa Ciobanu**, Irina Radinschi, *Frequency Resonant Behaviour of the Effective Permittivity for a Polyvalent Liquid Crystal in Microwave Range*, Journal of

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12. G. Zet, V. Manta, S. Oancea, I. Radinschi, **B. Ciobanu**, *A Computer Aided Study of De-Sitter Gauge Theory of Gravitation*, Mathematical and Computer Modelling, ISSN: 0895-7177, 43, pp. 458-465, 2006.

13. M. Agop, P. D. Ioannou, P. Coman, **B. Ciobanu**, P. Nica, *Cantorian $\xi^{(\infty)}$ Space-Time and Generalized Superconductivity*, Chaos Solitons & Fractals, Pergamon, printed in Great Britain, ISSN: 0960-0779, Vol. 12, Issue 11, pp.1947-1982, 2001.

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11. L. Ciobanu, **B. Ciobanu**, *Unele probleme privind fiabilitatea şi mentenanţa instalaţiilor de joasă tensiune*, Volumul Conferinţei Internaţionale pentru Construcţii şi Economia de Energie, Ediţia a-V-a, Vol.I, pp.251-256, 1995.

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

1. B. Ciobanu, C. Ciubotariu, I. Radinschi, M. C. Babiuc(-Hamilton), *The electromagnetic field in a rotating universe*, Proceedings of SSAE - Present and Perspective, First Section, Editura „Ion Ionescu de la Brad", Iaşi, România, ISSN 1454-7414, pp. 160-165, Vol. 48, 2005.

2. I. Radinschi and **B. Ciobanu**, *The Gravitational Field in a Dyadosphere of a Charged Black Hole*, Creativitatea în Ştiinţă şi Tehnică, Bucureşti, Editura Universităţii Naţionale de Apărare „Carol I", Bucureşti, ISBN: 973-663-165-6, pp. 5-9, 2005.

3. B. Ciobanu and M. Agop, *Some aspects of the generalized superconductivity*, Proceedings of SSAE - Present and Perspective, First Section, Editura „Ion Ionescu de la Brad", Iaşi, România, ISSN 1454-7414, Vol. 48, 2005.

4. C. Neacşu, C. Ciubotariu, I. Radinschi, **B. Ciobanu**, *The relativistic plasma in a Gödel universe (rotational)*, presented by **B. Ciobanu**, The IV-th Conferences on Theoretical Physics, General Relativity and Gravitation, held May 1994, Bistriţa, published in Proceedings of the IV-th and V-th Conferences on Theoretical Physics, General Relativity and Gravitation, held May 1994 and 1995, Bistriţa, Vol. 4-5, pp. 31-40, Ed. by Romanian Society on General Relativity and Gravitation, Iaşi, România, 1995.

J. Invenţii.

K. Contracte de cercetare/granturi

1. PN-II, Program IDEI, *Modele clasice şi cuantice pentru câmpurile gauge*, Cod CNCSIS: ID-620, Contract nr.2/28.IX.2007, 2007-2010, Gheorghe Zet- director program, **Iulia Brînduşa Ciobanu**- membru, valoare totala 600000 RON.

2. 5/11.09.2007, PN II, *Sistem performant de procesare şi stocare a datelor în GRID pentru experimentele ATLAS-CERN şi H1-DESY*, 2007- 2009, Irina Radinschi- responsabil partener UTI, **Iulia Brînduşa Ciobanu**- membru, valoare totală 140000.

3. *Investigarea proprietăţilor fundamentale ale radionuclizilor de viaţă scurtă prin studii de dezintegrare şi în fascicul- RSHE*, CEX-D10-08/03.10.2005, 2005-2008, **Iulia Brînduşa Ciobanu - responsabil proiect, partener UTI**, valoare totală 70000 RON.

4. *Sistem de comunicare cu persoane cu handicap neuro-locomotor major -TELPROT*, 69 CEEX-II, 31.07.2006-15.08.2008, Vlad Cehan- director program, **Iulia Brînduşa Ciobanu** - membru, valoare totală 1360000 RON.

5. Grant CNCSIS tip A, GR 80/23.05.2007, Tema 45, *Modelarea unor soluţii de tip gaură neagră din cadrul teoriei de string*, Cod CNCSIS 122, Etapa 2, *Modelarea proprietatilor energetice ale unor gauri negre de tip string*, Irina Radinschi- director de grant, **Iulia Brînduşa Ciobanu**- membru, 8000 RON.

6. Grant CNCSIS tip A, GR. 63/19.05.2006, Tema 23, *Modelarea unor soluţii de tip gaură neagră din cadrul teoriei de string*, Cod CNCSIS 122, Etapa 1 *Energia unor soluţii de tip string în cadrul formalismelor lui Møller, Einstein, Landau şi Lifshitz, Papapetrou şi Weinberg (ELLPW)*, I. Radinschi- director de grant, **Iulia Brînduşa Ciobanu**- membru, 8000 RON.

7. International Program JINR (Joint Institute for Nuclear Research)-IFIN-HH, *Ţiţeica – Markov in the field of Theoretical Physics*, 2003-2009, JINR coordinator- Victor V. Voronin (Deputy Director of the Bogoliubov Laboratory of Theoretical Physics, Dubna-Moscow Region), IFIN-HH coordinator Sabin Stoica (Theoretical Physics Department), Cod înregistrare 0034-05/258, 2004, Activităţi/ rezultate: stagii de lucru şi colaborări în cadrul temelor 01-3-1029-1999/2008 (Nuclear Theory),
http://www.nipne.ro/international/cooperation/jinr.php

8. Grant CNCSIS tip A, Tema 73, Cod CNCSIS: 341, Etapa 3/2004 Tema: *Programe de calcul analitic pentru studiul modelelor autoduale*, Gheorghe Zet- director de grant, **Iulia Brînduşa Ciobanu**- membru, 7000 RON.

9. Grant CNCSIS tip A, Tema 41, Cod CNCSIS: 341, Etapa 2/2003 Tema: *Teorii gauge auto-duale pentru gravitatie*, Gheorghe Zet- director de grant, **Iulia Brînduşa Ciobanu**- membru, 5130 RON.

10. Contract ad. 157/17.02.1999/ Beneficiar MCT, Alexandrina Jeflea- responsabil, **Iulia Brînduşa Ciobanu**- membru, valoare 21mil lei, Faze: *Despre aderenţa filmelor metalice la substratul polimeric, Evaluarea gradului de fixare a stratului subţire pe suportul polimeric. Experimentări.*

11. Contract ad. 974/13.08.1998/II, Alexandrina Jeflea- responsabil **Iulia Brînduşa Ciobanu**- membru, valoare 9,5 mil.lei, Tema A-1 : *Fenomene de transport în straturi subţiri de conducţii diferite (realizarea straturilor, aderenţa la substrat, modele de conducţie, aplicaţii). Metode de obţinere a straturilor subţiri din metale nobile şi analiza straturilor realizate. Efectul stării de cristalinitate a substratului polimeric asupra calităţii filmului metalic depus.*

12. Contract nr: 390/1997. Beneficiar MCT, *Obţinerea straturilor subţiri din materiale semiconductoare, termoelectrice, utilizate în conversia directă a surselor neconvenţionale şi alte aplicaţii ale efectelor termoelectrice*, Alexandrina Jeflea- responsabil, **Iulia Brînduşa Ciobanu** – membru, Faza A.1: *Tratarea teoretică a fluxurilor de energie în module semiconductoare termoelectrice în straturi subţiri- studiu.*

13. Grant CNCSIS, Cod CNCSIS 582/1997, *Teorii relativiste si gauge ale corpurilor cuantice macroscopice* Etapa 2/1997: *Supraconductori şi suprafluide în câmp gravitomagnetic*, Corneliu Ciubotariu- director contract, **Iulia Brînduşa Ciobanu**- membru.

14. Contractul de cercetare, nr.625/96, Cod program 4.2.5, beneficiar MCT, *Obţinerea straturilor subţiri din materiale semiconductoare termoelectrice utilizate în conversia directă a surselor neconvenţionale şi alte aplicaţii ale efectelor termoelectrice*, Faza A.2. Măsurători specifice în laborator pe dispozitive proprii pentru straturile subţiri, valoare 10 mil lei, Alexandrina Jeflea- responsabil contract, **Iulia Brînduşa Ciobanu**- membru.

15. Grant CNCSIS, Cod CNCSIS 510/1996, *Teorii relativiste si gauge ale corpurilor cuantice macroscopice*, Corneliu Ciubotariu- director contract, **Iulia Brînduşa Ciobanu**- membru.

16. Contractul de cercetare, nr.906 B/1995, cod program 4.2.5, beneficiar MCT, *Obţinerea straturilor subţiri din materiale semiconductoare termoelectrice utilizate în conversia directă a surselor neconvenţionale şi alte aplicaţii ale efectelor termoelectrice*, valoare 4 mil lei, Alexandrina Jeflea- responsabil contract, **Iulia Brînduşa Ciobanu**- membru, Faza 1.1. *Studiul efectelor termoelectrice în straturi subţiri semiconductoare. Metode de obţinere.*

L. Premii, distincţii

Premierea rezultatelor cercetarii. Premii CNCSIS 2008 (http://www.cncsis.ro/premii_2008)

1. Cod CNCSIS 110, pentru articolul- **Brînduşa Ciobanu**, Irina Radinschi, *Modeling the Energy Distributions of a Dilaton-Maxwell Gravity Solution*, Romanian Journal of Physics, Vol. 53, Nos. 1-2. pp. 29-34, 2008.

2. Cod CNCSIS 111, pentru articolul- **Brînduşa Ciobanu**, Irina Radinschi, *Modeling the Electric and Magnetic Fields in a Rotating Universe,* Romanian Journal of Physics, Vol. 53, Nos. 1-2. pp. 405-415, 2008.

M. Alte realizări semnificative

Număr de citări: 62 ISI, 132 în total.

Membru în organizaţii profesionale:

- Societatea Română de Gravitaţie şi Relativitate Generală;
- Societatea Română de Fizică;
- European Society of Physics
- Balkan Society of Geometers;
- Who is Who World Society;
- membru fondator Alumni – Facultatea Construcţii de Maşini şi Management Industrial, Universitatea Tehnică „Gh. Asachi" din Iaşi.

Organizator de manifestări ştiinţifice:

- membru în comitetul de organizare al *Conferinţei Naţionale de Fizică Aplicată*, 2008, 2010, 2014, 2016, Departamentul de Fizică, Universitatea Tehnică „Gh. Asachi" din Iaşi;
- organizator principal şi membru în comitetul de organizare al *Conferinţei Internaţionale "Design, Technology and Management in Manufacturing"*, 2010, Facultatea de Construcţii de Maşini şi Management Industrial, Universitatea Tehnică „Gh. Asachi" din Iaşi.

Activităţi în cadrul comunităţii academice

- îndrumător de an, seria Automatică Informatică Aplicată şi Sisteme Inteligente (Automatică şi Informatică Aplicată, Ingineria Sistemelor), studii de licenţă, anul I, Facultatea de Automatică şi Calculatoare din 2010 până în prezent;
- membru al Consiliului Facultăţii de Automatică şi Calculatoare, Universitatea Tehnică „Gh. Asachi", Iaşi 2008-2018, 2024 până în prezent;
- responsabil de laborator destinat studenţilor Facultăţii de Automatică şi Calculatoare din 2005 până în prezent;
- participare la *Tabăra de vară DevelopMe*, organizată de Liga studenţilor Facultăţii de Automatică şi Calculatoare, ediţiile 2022, 2023, 2024, 2025, în scopul promovării imaginii Facultăţii de Automatică şi Calculatoare;
- membru al Biroului Departamentului de Fizică al Universităţii Tehnice „Gh. Asachi" din Iaşi, 2007-2018;
- lider de sindicat al Departamentului de Fizică, din 2013 până în prezent;
- participare în calitate de expert în educaţie, la *Proiectul FIZTUIASI, Ateliere de fizică experimentală pentru elevi*, 1.03-25.10.2025, în scopul promovării imaginii Facultăţii de Automatică şi Calculatoare şi a învăţământului tehnic superior ieşean, în general;
- membru în Comisia de evaluare a Sesiunii de cercuri ştiinţifice studenţeşti din cadrul Departamentului de Fizică (2023, 2024, 2025);
- 57 de participări la workshopuri, la nivel naţional şi internaţional;
- membru în 7 comisii de concurs pe posturi didactice din învăţământul superior.

Data: 25.09.2025

Conf. dr. fiz. Ciobanu Iulia Brîndușa

Anexa II.09.b - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licenţă Ingineria sistemelor

Numele şi prenumele: MATEI RADU-CEZAR

A. Teza de doctorat

„Aplicaţii ale reţelelor neliniare în prelucrarea semnalelor" (susţinută: noiembrie 2002, conducător ştiinţific prof.dr.ing. Liviu Goraş)

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

3 capitole de carte în editură internaţională:

1. R.Matei – "New Model and Applications of Cellular Neural Networks in Image Processing", chapter in the book "Advanced Technologies", edited by Kankesu Jayanthakumaran, pp. 471-501, IN-TECH Open Access Publisher, Vienna, Austria, 2009, ISBN: 978-953-307-009-4
2. R.Matei – "New Design Methods for Two-Dimensional Filters Based on 1D Prototypes and Spectral Transformations", chapter in the book "Digital Filters", edited by Fausto Pedro García Márquez, pp. 91-121, IN-TECH Open Access Publisher, Vienna, Austria, April 2011, ISBN: 978-953-307-190-9
3. R.Matei, D.Matei – "Analytical Design of Two-Dimensional Filters and Applications in Biomedical Image Processing", chapter in the book "Digital Filters and Signal Processing", edited by Fausto Pedro García Márquez and Noor Zaman, IN-TECH Open Access Publisher, Vienna, Austria, January 2013, pp. 275-307, ISBN: 978-953-51-0871-9

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

Radu Matei – *Circuite electronice analogice*, Editura Tehnopress Iaşi, 2024, ISBN 978-606-687-529-5, 200 pagini, format academic

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Îndrumar de laborator la disciplina "Circuite electronice analogice", în format electronic (pdf), disponibil pe Teams
2. Suport de curs la disciplina: „Advanced Signal Processing Techniques", master IT4T (engleză) - format electronic (disponibil pe platforma moodle ETTI)
3. Suport de curs la disciplina: „Modelarea Componentelor Electronice", anul IV MON (113g.) - format electronic (disponibil pe platforma moodle ETTI)
4. Material laborator la disciplina: „Modelarea Componentelor Electronice", anul IV MON (73 pag.) - format electronic (disponibil pe platforma moodle ETTI)

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. R. Matei – *Analytical Design Methods for Directional Gaussian 2D FIR Filters*, Multidimensional Systems and Signal Processing (Springer), 27 (4), October 2016, ISSN 0923-6082, DOI 10.1007/s11045-016-0458-4 (2018 impact factor: 2.088)
2. R. Matei – *Analytic design of directional and square-shaped 2D IIR filters based on digital prototypes*, Multidimensional Systems and Signal Processing (Springer), March 2019, DOI: 10.1007/s11045-019-00631-0 (2018 impact factor: 2.088)
3. R. Matei – A Class of Directional Zero-Phase 2D Filters Designed Using Analytical Approach, IEEE Transactions on Circuits and Systems I: Regular Papers, vol. 69, no. 4, pp. 1629-1640, April 2022, ISSN 1549-8328, doi: 10.1109/TCSI.2021.3139141
4. R. Matei – Analytical Design and Applications of 2D Anisotropic Filters with Elliptical Frequency Response, Proc. of the Romanian Academy, Series A (Mathematics, Physics, Technical Sciences, Information Science), 23 (1), 2022, pp. 57-68, ISSN 1454-9069

   https://acad.ro/sectii2002/proceedings/doc2022-1/08-Matei.pdf
5. R. Matei, D.F. Chiper – Analytic Design Technique for 2D FIR Circular Filter Banks and Their Efficient Implementation Using Polyphase Approach, Sensors 2023, Volume 23, Issue 24, 9851; ISSN: 1424-8220, https://doi.org/10.3390/s23249851
6. R. Matei – Design and Applications of Adjustable 2D Digital Filters with Elliptical and Circular Symmetry, Analog Integrated Circuits and Signal Processing, Volume 114, pp. 345–358, March 2023, https://doi.org/10.1007/s10470-023-02152-0
7. R. Matei, D.F. Chiper – Analytic Design and Polyphase Implementation Technique for 2D Digital FIR Differentiators, Sensors 2024, 24(23), 7870, https://doi.org/10.3390/s24237870
8. R. Matei, D.F. Chiper – Analytical Design of Gaussian Anisotropic 2D FIR Filters and Their Implementation Using the Block Filtering Approach, Electronics 2024, 13 (7): 1243, https://doi.org/10.3390/electronics13071243
9. R. Matei, D.F. Chiper – Design and Polyphase Implementation of Rotationally Invariant 2D FIR Filter Banks Based on Maximally Flat Prototype, Electronics 2024, 13(14), 2829

   https://doi.org/10.3390/electronics13142829
10. D.F. Chiper, R. Matei – Design Technique and Efficient Polyphase Implementation for 2D Elliptically Shaped FIR Filters, Sensors 2025, 25, 4644. https://doi.org/10.3390/s25154644 (in curs de indexare)

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. R. Matei – Gaussian Circular 2D FIR Filters Designed Using Analytical Approach, WSEAS Transactions on Signal Processing, Volume 16, Art. #14, 2020, pp. 118-126, doi: 10.37394/232014.2020.16.14
2. R. Matei, D. Matei – *Study of EEG With Epileptic Activity Using Spectral Analysis and Wavelet Transform*, WSEAS Transactions on Signal Processing, Volume 13, 2017, pp. 241-247, E-ISSN 2224-3488
3. R. Matei – *Design Approach for 2D Recursive Filters Used in Frequency Plane Partitioning*, Journal of Scientific Research & Reports (Science Domain International), 12 (4): 1-9, 2016, ISSN 2320-0227
4. R.Matei – *Design of Adjustable Square-Shaped 2D IIR Filters*, ISRN Signal Processing, Hindawi Publishing Corporation, vol. 2013, Article ID 796830, 10 pages, September 2013
5. R.Matei, L.Goraş – *Elementary Linear Filtering Tasks Using CNNs With Minimum-Size Templates*, Journal of Automatic Control (JAC), Faculty of Electrical Engineering, University of Belgrade, Volume 13(1), 2003, pp.47-53

6. R.Matei, L.Goraş – *A Class of Circularly-Symmetric CNN Spatial Linear Filters*, Facta Universitatis (The Scientific Journal of the University of Nis, Serbia), Series: Electronics and Energetics, Vol.19, No.2, August 2006, pp.299-316
7. D.F. Chiper, R. Matei – Synthesis and Polyphase Implementation of Wide-Band Low-Pass Circular 2D FIR Filters, Annals of the Academy of Romanian Scientists, Series on Science and Technology of Information, 17 (1), 2024, pp. 60-73, ISSN 2066 – 8562

   https://aos.ro/wp-content/anale/IFVol17Nr1Art.5.pdf

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. D.Matei, R.Matei – *Diabetic Retinopathy Assessment Using Analog Processing of Angiography Images*, Bulletin of the Polytechnic Institute of Iasi, 2010, Tome LVI (LX), Fasc.1, Section 3
2. R.Matei – *On the Influence of Boundary Conditions on Pattern Formation in 1-D Cellular Neural Networks*, Bulletin of the Polytechnic Institute of Iasi, 1998, Tome XLIV (XLVIII), Fasc.3-4, Section 3

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

Lucrari conferinte ISI proceedings:

1. R.Matei – *Image Processing Using Hysteretic Cellular Neural Networks*, Proceedings of the International Symposium on Circuits and Systems, ISCAS'2000, 27-31 May 2000, Geneva, Switzerland, vol.IV, pp.129-132, ISBN: 0-7803-5482-6
2. R.Matei – Haar Filtering with Pyramidal Resistive Networks, Proceedings of the International Symposium on Circuits and Systems, ISCAS'2000, 27-31 May 2000, Geneva, Switzerland, vol.I, pp.575-578, ISBN: 0-7803-5482-6
3. Matei, L.Goraş – On Linear Filtering Capabilities Of 1-D CNNs With Minimum-Size Templates, Proc of 6th Seminar on Neural Network Applications in Electrical Engineering, NEUREL 2002, Belgrad, Yugoslavia, 26-28 Sept. 2002, pp.123-128, ISBN: 0-7803-7593-9
4. R.Matei – Cellular Neural Networks with Second-Order Cells and Their Pattern Forming Properties, Proc of IEEE International Symposium on Circuits and Systems, ISCAS'2003, Bangkok, Thailand, 25-28 May 2003, Vol.V, pp.773-776, ISBN: 0-7803-7761-3
5. R.Matei – Some Separable Linear Filtering Tasks Using CNNs, IEEE International Symposium on Signals, Circuits and Systems, SCS'2003, July 10-11 2003, Iaşi, Romania, pp.193-196, ISBN: 0-7803-7979-9
6. R.Matei – Design Method for Orientation-Selective CNN Filters, Proceedings of the IEEE International Symposium on Circuits and Systems ISCAS'2004, May 23-26, 2004, Vancouver, Canada, Vol.3, pp.105-108, ISBN: 0-7803-8251-X
7. R.Matei, L.Goraş – Design Methods for CNN Spatial Filters with Circular Symmetry, Proceedings of 7th Seminar on Neural Network Applications in Electrical Engineering, NEUREL'2004, Belgrade, Serbia, 23-25 Sept. 2004, pp.103-108, ISBN: 0-7803-8547-0
8. R.Matei – A Class of Hysteretic Circuits Using Operational Amplifiers, Proceedings of IEEE International Symposium on Signals, Circuits and Systems, ISSCS'2005, 7-9 July 14-15, 2005, Iaşi, Romania, pp. 425-428, ISBN 0-7803-9029-6
9. R. Matei – Design of a Class of Maximally-Flat Spatial Filters, Proceedings of the IEEE International Symposium on Circuits and Systems ISCAS'2006, May 21-24, 2006, Kos Island, Greece, pp.2165-2168, ISSN: 0277-674X, ISBN: 978-0-7803-9389-9
10. R.Matei – Design Method for Polygonal Spatial Filters, The IEEE Region 8 EUROCON 2007 Conference "Computer as a Tool", Sept. 9-12, 2007, Warsaw, Poland, Proceedings Vols.1-6, pp. 2310-2314, ISBN: 978-1-4244-0812-2

11. R.Matei – Gaussian Shaped Multiband FIR and IIR 2D Filters, 14th IEEE International Conference on Electronics, Circuits and Systems, ICECS 2007, December 11-14, 2007, Marrakech, Maroc, pp. 254-257, ISBN: 978-1-4244-1377-5
12. R.Matei – Directional Zero-Phase 2D IIR Filter Design Using Chebyshev-Padé Approximation, 14th IEEE Int. Conf. on Electronics, Circuits and Systems, ICECS 2007, December 11-14, 2007, Marrakech, Maroc, pp.959-962, ISBN: 978-1-4244-1377-5
13. R.Matei – Design of Gaussian Bandpass Two-Dimensional FIR Filters, The 7th IEEE International Symposium on Signal Processing and Information Technology, ISSPIT 2007, December 15-18, 2007, Cairo, Egypt, pp.651-654, ISBN: 978-1-4244-1834-3
14. R.Matei – Two-Dimensional Filters Designed in Polar Coordinates, The 7th IEEE International Symposium on Signal Processing and Information Technology, ISSPIT 2007, December 15-18, 2007, Cairo, Egypt, pp.671-676, ISBN: 978-1-4244-1834-3
15. R.Matei – Gaussian-Shaped Circularly-Symmetric 2D Filter Banks, Proceedings of the 7th WSEAS Intl Conference on Signal Processing, Robotics and Automation ISPRA'08, Cambridge, England, UK, Febr. 20-22, 2008, pp.110-114, ISBN: 978-960-6766-44-2
16. D.Matei, R.Matei – Detection of Diabetic Symptoms in Retina Images Using Analog Algorithms, Proceedings of the 7th WSEAS International Conference on Signal Processing, Robotics and Automation ISPRA'08, Cambridge, England, UK, Febr. 20-22, 2008, pp.198-203, ISBN: 978-960-6766-44-2
17. R.Matei, P.Ungureanu – A Class of Gaussian-Shaped CNN Filter Banks, Proc. of 11th International Workshop on Cellular Neural Networks and their Applications, CNNA 2008, July 14-16, 2008, Santiago de Compostela, Spain, pp.135-139, ISBN: 978-1-4244-2089-6
18. R.Matei – Cellular Neural Networks with Second-Order Cells: Dynamics Analysis and Linear Filtering, Proc. of 11th International Workshop on Cellular Neural Networks and their Applications, CNNA 2008, July 14-16, 2008, Santiago de Compostela, Spain, pp.242-247, ISBN: 978-1-4244-2089-6
19. R.Matei, D.Matei – Orientation-Selective 2D Recursive Filter Design Based on Frequency Transformations, IEEE Region 8 EUROCON 2009 Conference, St. Petersburg, Russia, May 18-23, 2009, pp. 1320-1327, ISBN: 978-1-4244-3861-7
20. R.Matei, P.Ungureanu – Image Processing Using Elliptically-Shaped Filters, Proceedings of IEEE International Symposium on Signals, Circuits and Systems, ISSCS 2009, July 9-10, 2009, Iasi, Romania, Vol.2, pp. 337-340, ISBN: 978-1-4244-3784-9
21. R.Matei – Design Method for Wedge-Shaped Filters, Proceedings of the International Conference on Signal Processing and Multimedia Applications SIGMAP 2009, July 7-10, 2009, Milano, Italy, pp. 19-23, ISBN: 978-989-674-007-8
22. R.Matei – Resistive Networks for Signal and Image Filtering in the Haar Basis, Proceedings of the 19th European Conference on Circuit Theory and Design ECCTD'09, August 23-27, 2009, Antalya, Turkey, pp.503-506, ISBN: 978-1-4244-3896-9
23. R.Matei – Analytic Design Method and Applications of Two-Directional Wedge-Type Filters, 11th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering (MACMESE'09), Baltimore, Maryland, USA, November 7-9, 2009, pp.220-225, ISSN: 1790-2769, ISBN: 978-960-474-133-5
24. R.Matei – A New Design Approach for Recursive Diamond-Shaped Filters, 11th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering (MACMESE'09), Baltimore, Maryland, USA, November 7-9, 2009, pp.226-230, ISSN: 1790-2769, ISBN: 978-960-474-133-5
25. R.Matei – Design Techniques for Two-Directional Recursive Filters, Proceedings of the IEEE 53rd Midwest Symposium on Circuits and Systems, MWSCAS 2010, August 1-4, 2010, Seattle, USA, pp. 371-374, ISBN: 978-1-4244-7772-2
26. R.Matei – Two-Dimensional IIR Filter Design Using Prototype Biquad Transformation, Proceedings of the IEEE 53rd Midwest Symposium on Circuits and Systems, MWSCAS 2010, August 1-4, 2010, Seattle, USA, pp. 375-378, ISBN: 978-1-4244-7772-2
27. R.Matei – A New Design Method for IIR Diamond-Shaped Filters, Proceedings of the 18th European Signal Processing Conference EUSIPCO 2010, Aalborg, Denmark, August 23-27, 2010, pp. 65-69, ISSN: 2076-1465

28. R.Matei, D.Matei – Design and Applications of 2D Directional Filters Based on Frequency Transformations, Proceedings of the 18th European Signal Processing Conference EUSIPCO 2010, Aalborg, Denmark, August 23-27, 2010, pp. 1695-1699, ISSN: 2076-1465
29. D.Matei, R.Matei, C.Corciovă – A Class of 2D Directional Filters with Applications in Biomedical Image Analysis, 5th European Conference of the International Federation for Medical and Biological Engineering EMBEC 2011, 14-18 Sept. 2011, Budapest, Hungary, IFMBE Proceedings Vol. 37 (Springer series), pp. 647-650, ISSN: 1680-0737, ISBN: 978-3-642-23507-8
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32. R.Matei – Recursive Fan-Type Filter Design From 1D Analog Transfer Functions, Proceedings of the 20th European Signal Processing Conference EUSIPCO 2012, Bucharest, Romania, 27-31 August 2012, pp. 1064-1068, ISSN: 2076-1465, ISBN: 978-1-4673-1068-0
33. R.Matei – Parametric 2D Gaussian Circular Band-Pass Filters, Proceedings of IEEE International Symposium on Signals, Circuits and Systems, ISSCS 2013, 11-12 July 2013, Iasi, Romania, ISBN 978-1-4673-6141-5
34. R.Matei – Efficient Design of Adjustable Circular IIR 2D Filters, Proceedings of the IEEE 56th Midwest Symposium on Circuits and Systems MWSCAS 2013, Columbus, Ohio, USA, 4-7 Aug. 2013, pp. 1302-1305, ISBN: 978-1-4799-0066-4, ISSN: 1548-3746
35. D. Matei, C. Corciovă, R. Matei, B. Ignat, O. Bolbocean, D. Alexa, C.D. Popescu – Nerve Conduction Studies in Peripheral Arterial Disease With and Without Type 2 Diabetes Mellitus, Proc. of 4-th IEEE International Conference on e-Health and Bioengineering, EHB 2013, 21-23 Nov. 2013, Iasi, Romania, ISBN: 978-1-4799-2372-4
36. R. Matei – Design of 2D Recursive Filters with Double-Directional Selectivity, Proceedings of 38th IEEE International Conference on Telecommunications and Signal Processing, TSP 2015, 9-11 July 2015, Prague, Czech Republic, pp. 1-5, DOI 10.1109/TSP.2015.7296392
37. D. Matei, C. Corciova, R. Matei, I. Constantinescu, I. Cuciureanu – QT Interval in Vascular Dementia and Alzheimer's Disease, Proc. of 5-th IEEE International Conference on E-Health and Bioengineering, EHB 2015, 19-21 Nov. 2015, Iasi, Romania, ISBN: 978-1-4673-7544-3
38. R. Matei – 2D IIR Filters With Square-Shaped Frequency Response, Proceedings of IEEE International Symposium on Signals, Circuits and Systems, ISSCS 2015, 9-10 July 2015, Iasi, Romania, ISBN 978-1-4673-7488-0/15
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41. R. Matei – *Analytical Design of Elliptically-Shaped 2D Recursive Filters*, Proceedings of IEEE 61st International Midwest Symposium on Circuits and Systems MWSCAS 2018, 5-8 Aug. 2018, Windsor, Ontario, Canada, pp. 964-967, ISBN 978-1-5386-7392-8/18,
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43. R. Matei, D. Matei – Frequency Analysis of EEG Signals Using Band Energy Distribution, Proceedings of 9-th IEEE Intl Conference on e-Health and Bioengineering (EHB 2021), 18-19 November 2021, Iaşi, Romania, pp. 1-4, doi: 10.1109/EHB52898.2021.9657648

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46. R. Matei – Analytic Design of Uniform Circular Filter Banks, Proc. of the 24-th IEEE Conf. Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA), 23-25 September 2020, Poznań, Poland, pp. 58-62, doi: 10.23919/SPA50552.2020.9241281
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50. R. Matei – Design Procedure for 2D Gaussian Anisotropic Filters, Proc. of IEEE 63rd Intl Midwest Symposium on Circuits and Systems MWSCAS 2020, 9-12 August 2020, Springfield, Massachusetts, USA, pp. 174-177, doi: 10.1109/MWSCAS48704.2020.9184594
51. R. Matei, D. Matei – Multiresolution Spectral Analysis of Epileptic EEG Signals Using Various Wavelet Types, Proc. of 7-th IEEE Intl Conf on E-Health and Bioengineering, EHB 2019, 21-23 November 2019, Iaşi, Romania, doi: 10.1109/EHB47216.2019.8969883
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Alte conferinţe:

1. R.Matei – Some Spatial Linear Filtering Operations with Cellular Neural Networks, Proceedings of ATEE'98 Symposium (Advanced Topics in Electrical Engineering), 3-4 Dec. 1998, Bucharest, Romania, pp.67-73
2. R.Matei – Applications of Hysteretic Cellular Neural Networks in Image Processing, Proceedings of the International Symposium on Signals, Circuits and Systems, SCS'99, 7-9 July 1999, Iaşi, Romania, pp. 119-122
3. R.Matei – New Image Processing Tasks On Binary Images Using Standard CNNs, Proceedings of the International Symposium on Signals, Circuits and Systems, SCS'2001, July 10-11, 2001, Iaşi, Romania, pp.305-308, ISBN 973-8050-99-5
4. R.Matei – On the Design of a Class of Selective CNN Linear Filters, Proceedings of the 8th IEEE International Workshop on Cellular Neural Networks and their Applications, CNNA'2004, 22-24 July 2004, Budapest, Hungary, pp.153-158
5. R.Matei – A CMOS Analog Circuit for Implementing Some Nonlinear Current-Voltage Characteristics, Proceedings of 2007 IEEJ International Analog VLSI Workshop, November 7-9, 2007, Limerick, Ireland, pp.84-87
6. D.Matei, R.Matei – New Algorithms for Pathology Detection in Angiography Images, 4th Annual Symposium of the Benelux Chapter of the IEEE Engineering in Medicine and Biology Society (EMBS), 9-10 November 2009, University of Twente, Enschede, the Netherlands, pp.94-97, ISBN: 978-90-365-2933-4
7. R.Matei, D.Matei – EEG Signal Analysis Using Nonlinear Dynamic Techniques, 4th Annual Symposium of the Benelux Chapter of the IEEE Engineering in Medicine and Biology Society (EMBS), 9-10 November 2009, University of Twente, Enschede, the Netherlands, pp.133-136, ISBN: 978-90-365-2933-4

8. R.Matei, D.Matei – Study of Some EEG Signal Processing Methods for Detection of Epileptic Activity, the 12-th Mediterranean Conference on Medical and Biological Engineering and Computing MEDICON 2010, May 27-30, 2010, Chalkidiki, Greece, IFMBE Proceedings (Springer series) Vol.29, pp.192-195, ISBN 978-3-642-13039-7
9. R. Matei, C. Grigoraş – Nonlinear Dynamics in CNN's with Second-Order Cells, The 3rd Chaotic Modeling and Simulation International Conference CHAOS'2010, Chania, Crete, Greece, June 1-4 2010
10. R.Matei, D.Matei – Vascular Image Processing Using Recursive Directional Filters, World Congress on Medical Physics and Biomedical Engineering, Beijing, China, May 26-31, 2012, IFMBE Proceedings Vol. 39 (Springer series), pp. 947-950, ISBN: 978-3-642-29304-7
11. R.Matei – Design of 2D Parametric Filters for Directional Gaussian Smoothing, Proceedings of the 21st European Conference on Circuit Theory and Design, ECCTD'13, 8-12 September 2013, Dresden, Germany, pp. 1-4, ISBN: 978-3-00-043430-3
12. R. Matei – 2D Wedge Filter Design and Applications in Oriented Line Extraction, Proceedings of WSEAS European Computing Conference ECC 2015, 12-14 December 2015, Budapest, Hungary, pp. 205-210, ISBN: 978-1-61804-355-9

J. Invenţii.

K. Contracte de cercetare.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 27/09/2025

Grad didactic, Titlu stiințific, Numele si prenumele: Conf. dr.ing. Matei Radu Cezar

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Panainte Daniela Lucia (Ene)
Gradul didactic: conf. univ. dr
Instituția unde este titular: Universitatea Tehnică "Gheorghe Asachi"din Iași
Departamentul pentru Pregătirea Personalului Didactic

A.Teza de doctorat: *Îmbinările stabile de cuvinte în limbile română și engleză. Perspective traductologice*
Titlul de doctor a fost acordat prin ordinul ministrului educației naționale şi cercetării ştiințifice nr. 5321 din 29.09.2016.)

C.Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

1. **Daniela Lucia Ene,** *Traduttore, traditore. Incursiune în teoria și practica traducerii unităților frazeologice*, Casa Editorială Demiurg, Iași, 2015, 288 pg., ISBN 978-973-152-299-9 (Colecția Lingua- sub coordonarea prof. univ. dr. Constantin Frâncu), cod CNCSIS 84,
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2. **Daniela Lucia Ene**, *Academic Writing: A Handbook for Computer Science Students*, Editura Performantica - Institutul Național de Inventică, Iași, 2015, 181 pg., ISBN 978-606-685-263-0,
   ISBN, cod CNCSIS 85, http://www.inventica.org.ro/performantica/carti.html
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3. Doina Mihaela Popa, **Daniela Lucia Ene,** *Mic dicționar explicativ de comunicare român-francez-englez*, Editura Stef, Iași, 2015, 230 pg., ISBN 978-606-575-445-4, cod CNCSIS 88,
   http://www.editurastef.ro/
4. Doina Mihaela Popa, **Daniela Lucia Ene,** *Petit dictionnaire explicatif de communication français-anglais-roumain*, Editura Stef, Iași, 2014, 228 pg., ISBN 978-606-575-421-8, cod CNCSIS 88, http://www.editurastef.ro/
5. **Daniela Lucia Ene**, Marian Panainte, *Emoție și interpretare în jocul actoricesc*, în volumul: *Etic și estetic. Modalități interpretative, contraste și controverse*, vol. I, Ed. ARS LONGA, colecția *Academica*, 2015, ISBN 978-973-148-206-4, pp. 175-186, www.arslonga.ro., indexat BDI
6. Mioara Mocanu, **Daniela Lucia Ene,** «*Homo europaeus la răscruce de epoci romantice* », în volumul : *Artă și personalitate. Dimensiuni filosofice și psihologice*, vol. I, Ed. ARS LONGA, colecția *Academica*, 2014, ISBN 978-973-148-168-5, pp. 212 – 227, www.arslonga.ro., indexat BDI
7. **Daniela Lucia Ene**, *How to deal with the English communication difficulties faced by Computer Science students*, în volumul: Limbaje aplicate în mediul academic, Performantica, Iași, 2014, ISBN 978-606-685-235-7, pp. 60-69, cod CNCSIS 85, http://www.inventica.org.ro/performantica/carti.html

8. **Daniela Lucia Ene**, Rada Proca, *English for Computer Science Students*, Editura Politehnium, Iaşi, 2011, 200 pg., ISBN 978-973-621-328-1, cod CNCSIS 211, http://www.tuiasi.ro/publicatii/politehnium

E.Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

1. Daniela Lucia Ene, *Academic Writing: A Handbook for Computer Science Students*
http://limbistraine.tuiasi.ro/images/7.%20Resurse/Cursuri/Daniela%20Ene/Academic%20Writing%20-%20Handbook.pdf

2. Doina Mihaela Popa, **Daniela Lucia Ene**, *Explanatory Little Dictionary of French-Romanian-English Communication Terminology,* 100 pg.
http://limbistraine.tuiasi.ro/images/7.%20Resurse/Cursuri/Daniela%20Ene/Dictionar%20de%20comunicare-1.pdf

3. Utilizarea sistemelor de predare/ învăţare/ evaluare de tip e-learning/ on-line/ multimedia etc.
Daniela Lucia Ene, *English Language Learner Resource for IT students ~ with exercises,* 110 pg.
http://limbistraine.tuiasi.ro/images/7.%20Resurse/Cursuri/Daniela%20Ene/English%20for%20IT_Daniela_Ene.pdf

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

1. Panainte, Daniela-Lucia, *Traducerea unităților frazeologice în textele literare. O abordare practică.* Les Cahiers Linguatek, ISSN: 2559-7752, nr. 9-10, 2021 : "Mémoire et oubli", 2021,
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2. **Daniela Lucia Ene**, *Tragedia în literatură. Scurtă analiză,* Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Secţia Ştiinţe Socio-Umane, Editura Politehnium, vol.62, nr 2, 2016, ISSN 1224-5860, indexata CEEOL, Fabula
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3. Daniela Lucia Ene, Marian Panainte, *Sources of the Actors' Emotions Expressed on Stage*, The Scientific Journal of Humanistic Studies, Argonaut Publishing House, ISSN 2066-8880, 2015, pp 84-88, year 7, no. 12, indexare EBSCO
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4. Daniela Lucia Ene, *From the "art" of meaningful forms to the "science" of cultural discourse in translation theory*, Journal of Humanistic and Social Sciences, vol V, No. 1 (9)/2014 ISSN 2067-6557, ISSN-L 2247/2371, pp.111-120 , indexare DOAJ, COPERNICUS
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5. Daniela Lucia Ene, *The Correlation between Language and Cultural Identity in Phraseological Units*, Buletin Stiințific Mihail Kogălniceanu, vol 22, nr.2 Editura Cugetarea, Iași, 2014, ISSN 1221-4876, pp. 109-116, indexare COPERNICUS; CEEOL, IdeasRePeC, Econpapers, Socionet, Journal Seek de la Questia
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6. Daniela Lucia Ene, Marian Panainte, *Beyond Language in Translation Theory: Translation and Nonverbal Communication*, The Scientific Journal of Humanistic Studies, Argonaut Publishing House, ISSN 2066-8880, 2014, pp. 94-98, year 6, no. 1, indexare EBSCO
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7. **Daniela Lucia Ene**, *Conceptul de «echivalenţă» în traducerea îmbinărilor stabile de cuvinte din limbile engleză şi română*, Philologica Jassyensia, an VI, nr. 2 (12), 2010, ISSN 1841-5377, ISSN online 2247-8353, ISSN-L 1841-5377, pp.199-210, indexare COPERNICUS; CEEOL, EBSCO, Fabula, Google Scholar, The Linguist List, Proquest, Scipio, Ulrichsweb
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8. **Daniela Lucia Ene**, *Phraseology and culture*, Interstudia, no.3/2009, Editura Alma Mater, 2009, ISSN 2065-3204, pp. 42-49, indexare COPERNICUS, Fabula, CEEOL
http://www.pubs.ub.ro/index.php?pg=revues&rev=inters&num=200903&vol=0&aid=2842
Articol/studiu publicat în revistă de specialitate neindexată în baze de date (unic autor)
9. Daniela Lucia Ene, *Academic Writing for Engineering Students*, în Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Secţia Ştiinţe Socio-Umane, Editura Politehnium, Tomul LX (LXIV), Fasc. 1-2, 2014, ISSN 1224-5860, pp. 49-54
10. Daniela Lucia Ene, *The Issue of Equivalence in the Theory of Translation*, în Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Secţia Ştiinţe Socio-Umane, Editura Politehnium, Tomul LIX (LXIII), Fasc 3-4, 2013, ISSN 1224-5860, pp.17-21
11. **Daniela Lucia Ene**, *Expressive Functions of Idioms in Text*, în Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Secţia Ştiinţe Socio-Umane, Editura Politehnium, Tomul LVI (LX), Fasc 4, 2010, ISSN 1224-5860, pp. 10-13

I.2. **Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI**
1 Daniela Lucia Ene, *Translation of Idioms in English and Romanian Literary Texts*, Globalization and National Identity. Strategies on the Strategies of Intercultural Dialogue, ArhipelagcXXI Press, 2016 volum apărut după participarea la Conferinta internatională (GIDNI-II), 2nd edition, Universitatea Petru Maior, Tîrgu Mureş, 28 mai, 2015
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2. Daniela Lucia Ene, *Cultural Models and Conceptual Metaphors in Translating Idioms*, Journal of Romanian Literary Studies, Editor Iulian Boldea, în volumul: Globalization and intercultural dialogue. Multidisciplinary perspectives (Editor: Iulian Boldea), Arhipelag XXI Press, Târgu Mureş, 2014, ISBN 978-606-93691-3-5, pp.755-63, , volum apărut după participarea la Conferinta internatională Globalization, Intercultural Dialogue and National Identity (GIDNI - I) - Secţiunea: Language and Discourse, ISI Web of Science la Thomson Reuters,
http://www.upm.ro/gidni/GIDNI-01/Lds/Lds%2001%2045.pdf
3.Daniela Lucia Ene, Mioara Mocanu, «*Translation - possible or not possible? Linguistic identity and cultural transfer*», coautor, comunicare la Colloque International *L'Epoque des Grandes Ouvertures*, cu tema: *Le Rôle des Langues et des Littératures dans la Société Pluraliste*, Facultatea de Limbi şi Literaturi Străine, Universitatea de Stat Moldova, Chişinău, 27-28 martie 2014, Axa 4. Traductologia - ştiinţă a comunicării lingvistice şi culturale - cu *adeverinta de publicare* in 2015.
4 Daniela Lucia Ene, *Translation and Cultural Identity in Phraseology*, în volumul „Relaţia identitate-alteritate şi stereotipurile socio-culturale", Performantica, Iaşi, 2015, ISBN 9780606-685-278-4, volum apărut după participarea la Sesiunea de comunicări "Relaţia identitate-alteritate şi stereotipurile socio-culturale", 29 Mai 2015
2015/Simpozion_mai_2015/PROGRAM%20FINAL%20SIMPOZION.pdf
5 Daniela Lucia Ene, *Traducerea metaforei şi îmbinările stabile de cuvinte în limbile engleză şi română*, în volumul: „Limbajul Medical - Istoric şi perspective", Editura „Gr. T. Popa", Iaşi, 2013, ISBN 978-606-544-139-2, pp.212-223, volum apărut după participarea la Simpozionul

Național „Limbajul Medical - Istoric și perspective", Iasi, 23 martie 2013
6 Daniela Lucia Ene, *Identitate culturală în unitățile frazeologice*, în volumul: „Dimitrie Cantemir-Principe roman si carturar European„- Lucrarile celei de-a X-a editii a Simpozionului Național cu Participare Internațională „Dimitrie Cantemir si Vocația Europeana a Gandirii Romanesti, Editura Spiru Haret, Iași, 2013, ISBN 978-973-579-212-1, pp. 80-84, volum apărut după participarea la Simpozionul Național cu participare internațională, 24.10.2013, Iasi „Dimitrie Cantemir și Vocația Europeană a Gândirii Românești"

K.Contracte de cercetare/granturi

Membru în Proiectul de cercetare Tehnologii inovative de obtinere a nanofibrelor prin sistem computerizat de electrofilare – ELECTROSPIN - PN II-71_003 (2007-2010), valoare RON = UTI 450.112/ Tp=1.105.137, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Sisteme inteligente pentru monitorizarea la distanță a proceselor de recuperare bazate pe fes – ARMS - PN II-71_095 (2007-2009) valoare RON = UTI 708 321
Tp=934.771.63, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Parteneriat stiintific in domeniul nanostiintelor si nanotehnologiilor aplicate in textile – Partexnet, CEEX68_Modul III (2006-2008) valoare RON = UTI 30.300, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Tehnologii noi aplicate materialelor din fibre liberiene utilizand procese chimice si enzimatice in ultrasunete pentru obtinerea de materiale performante – TENZINUS – CEEX 55/2006, modul I, (2006-2007) valoare RON = UTI 31800, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Structuri textile pentru imbracaminte comunicanta – SMARTEX - CEEX 8/152 – VIASAN- modul I, (2006-2008) valoare RON = UTI 337.500/Tp = 710.000, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Retea regionala de excelenta in domeniul micro-nano-bio tehnologiilor si materialelor textile pentru aplicatii medicale – Eurotexmed CEEX181_modul III, (2006-2008) valoare RON = UTI 110.000/Tp =195 000, director: conf.dr. Manea Liliana
- Membru în Proiectul de cercetare Sisteme computerizate de filtrare si separare activate cu ultrasunete si controlate cu biosenzori pentru procese textile – FILTSOFTUS – CEEX 77/2006 CEEX- M1- 77– MATNANTECH, (2006-2008) valoare RON = UTI 620.000/Tp = 1.212.849, director: conf.dr. Manea Liliana
- Membru in proiectul "TUIASI – Universitate incluzivă", proiect de dezvoltare instituțională, nr. CNFIS-FDI-2024- 0116 15x226413,33/10 mii lei/29
- Membru in proiectul Sinergii pentru Internaționalizarea Sustenabilă a TUIASI la nivel European și Mondial (SISTEM), Domeniul 2: Creșterea gradului de internaționalizare a învățământului superior din România, Codul proiectului: CNFIS-FDI-2025-F-0103

Membru în organizaţii profesionale: Membru LINGUATEK – Centrul de Limbi Moderne Aplicate și Comunicare, Universitatea Tehnică „Gh. Asachi" Iași

Data: 29 septembrie 2025

Numele și prenumele
Panainte Daniela-Lucia

Semnătura

Anexa A.3.3.c. Lista de lucrări, cadre didactice

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Nume Prenume: Alexa Elena Lidia
Gradul didactic: Conf. Univ.

A. Teza de doctorat

1. Marketingul urban și impactul acestuia asupra competitivității centrelor urbane, Universitatea „Alexandru Ioan Cuza" Iasi, coordonator – Prof. Univ. Dr. Ștefan Prutianu. Ordinul Ministrului Educației Naționale nr. 165 din 07.04.2014.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. **Alexa, L.,** Lăzărescu, R.P. (2022). *Managementul marketingului. Teorie. Aplicații.Teste grilă*. Ed. Performantica, Iași. 240 de pagini. ISBN 978-606-685-961-5.
2. Lidia Alexa (2021), *Managementul marketingului. Note de curs.* Editura Performantica, Iași, ISBN 978-606-685-840-3, 154 pagini
3. Avasilcăi, S., Huțu, C.A., **Alexa E. L.** (2016), *Metodologia de cercetare* cap. în Inovare prin Co-creare în era online, editori Avasilcăi, S., Huțu, C.A, pp. 65-86, Ed. Performantica, Iași, 434 pag.
4. **Alexa E. L.** (2016), *Studiu de caz DELL* cap. în Inovare prin Co-creare în era online, editori Avasilcăi, S., Huțu, C.A, pp. 219-243, Ed. Performantica, Iași, 434 pag.
5. Stoica, C.M., **Alexa E.L.**, (2016) *Marketing educațional*, Ed. Tehnopress Iasi, ISBN 978-606-687-247-8 – 125 de pagini.
6. Stoica, C.M., **Alexa E.L.** (2010). *Cercetări de marketing. Teorie şi aplicaţii.* Editura C.H. Beck, Bucureşti, 296 de pagini. ISBN 973-115-777.

Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

7. Suport de curs Cercetări de marketing. 49 de pagini
8. Suport de curs Bazele managementului II. 77 de pagini
9. Suport de curs Educație antreprenorială. 60 de pagini
10. Suport de curs E-Business. 65 de pagini.
11. Suport de curs Managementul ciclului de viața al produselor. 40 de pagini.
12. Suport de curs Managementul ciclului de viața al produsului. 56 de pagini.
13. Suport de curs Educație antreprenorială. 48 de pagini.
14. Suport de curs Administrarea proiectelor în Era digitală. 49 de pagini.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani
Reviste cotate ISI:

11. **Alexa, L.,** Alam, M. M. D., Chelariu, C., Rahman, S. A., & Taghizadeh, S. K. (2024). Exploring the Institutional and Personal Determinants of Social Entrepreneurial Intentions: A Cross-Country Analysis. *Journal of Social Entrepreneurship*, 1–32. IF 2,6 Q3
12. Dosoftei, C.C., **Alexa, L.** Students' perception of peer teaching in engineering education: a mixed–method case study. HUMANITIES & SOCIAL SCIENCES COMMUNICATIONS, 11, 793 (2024). IF 3,7, Q1 https://doi.org/10.1057/s41599-024-03349-y
13. **Alexa, L.,** Pîslaru, M., Avasilcăi, S., Lucescu, L., Bujor, A., Avram E. (2022). Exploring Romanian Engineering Students' Perceptions of Covid-19 Emergency e-Learning Situation.

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15. Seyedeh Khadijeh Taghizadeh, Syed Abidur Rahman, Davoud Nikbin, Mirza Mohammad Didarul Alam, **Lidia Alexa**, Choo Ling Suan & Shirin Taghizadeh (2021) Factors influencing students' continuance usage intention with online learning during the pandemic: a cross-country analysis, *Behaviour & Information Technology*, DOI: 10.1080/0144929X.2021.1912181. WOS:000639089400001. https://www.tandfonline.com/doi/abs/10.1080/0144929X.2021.1912181?journalCode=tbit20
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17. **Alexa, L.**; Maier, V.; Șerban, A.; Craciunescu, R. Engineers Changing the World: Education for Sustainability in Romanian Technical Universities — An Empirical Web-Based Content Analysis. *Sustainability* **2020**, *12 (5)*, 1983. ISSN 2071-1050. WOS:000522470900284. https://www.mdpi.com/2071-1050/12/5/1983
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20. **Alexa, L.;** Alam, M.M.D. (2019) Industry 4.0 adoption. An overview of European Union Enterprises, in Proceedings of the 34th IBIMA Conference: Vision 2025: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage, 13-14 November 2019, Madrid, Spain. 978-0-9998551-3-3. WOS:000561117201022
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22. Pislaru, M., **Alexa, L.,** Avasilcai, S., (2018) *Assessment of Project Management Implementation Based On Fuzzy Logic Approach*, in Soliman, KS (Ed.) Innovation Management And Education Excellence Through Vision 2020, Vols I–XI, Proceedings of the 31st International-Business-Information-Management-Association Conference, APR 25-26, 2018, Milan, ITALY, ISBN:978-0-9998551-0-2, pp. 6079-6086, Accession Number: WOS:000444067203030
23. Bagiu, N., Avasilcăi, S., **Alexa, L.**, (2018) *„An "agile" approach to develop a crowdsourcing platform: the case of Cre@tive.biz"*, 04011, Annual Session of Scientific Papers ModTech 2018, IOP Conf. Series: Materials Science and Engineering 400 (2018)

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25. **Lidia Alexa**, Silvia Avasilcăi (2017), *An Empirical Research on Co-Creation in the Romanian Electronic Industry: The E-PICUS Case*, Proceedings of the 29th International Business Information Management Association Conference - Sustainable Economic Growth, Education Excellence, and Innovation Management through Vision 2020, pp. 2211 – 2216, ISBN: 978-0-9860419-7-6, Accession Number: WOS:000410252701090.
26. **Lidia Alexa**, Silvia Avasilcăi (2017), *Online Marketing as Part of the Internationalization Strategy An Analysis over Website Communication,* Proceedings of the 30th International Business Information Management Association Conference, Vision 2020: Sustainable Economic development, Innovation Management, and Global Growth, pp. 2043-2056. ISBN: 978-0-9860419-9-0, Accession Number: WOS:000443640501075
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28. **Alexa, E.L.,** Alexa, M., Stoica, C.M. (2012) *The Use Of Online Marketing And Social Media In Higher Education Institutions In Romania,* Journal of Marketing Research & Case Studies, ISSN: 2165-7009, 9 pages. Revista indexată în EBSCO*host:* Business Source Complete, EBSCO*host:* Business Source Corporate Plus, Cabell's Directory, ProQuest, Ulrich's Periodicals Directory, Media Finder, J-Gate, JournalSeek, Airiti Library, CNKI Scholar, WorldCat. WOS:000317550000032

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29. N Bagiu, S Avasilcăi, **L Alexa** (2019) *An overview of strategic issues in the evolution of IT industry*, IOP Conference Series: Materials Science and Engineering, Volume 568, Annual Session of Scientific Papers "IMT ORADEA 2019" 30–31 May 2019, Oradea, Felix SPA, Romania.
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33. Adriana BUJOR, Silvia AVASILCAI, **Lidia ALEXA** (2017) *Co-creation in fashion industry: the case of Awaytomars*, Revista Annals of the Oradea University. Fascicle of Management and Technological Engineering, CNCSIS "Clasa B+", ISSN 2501-5796

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37. **Alexa, E.L.,** Alexa, M., (2015) *A Conceptual Approach Over E-Business Model Evaluation*, Review of Management and Economic Engineering, Volume 14, No. 4 (58), ISSN 1583-624X Revistă Indexată În Ulrich's Periodicals Directory, Ebsco Business Source(R) Complete Database, Index Copernicus, Cabell's Directory
38. **Alexa, E.L.,** Alexa, M., Avasilcăi, S. (2014) *An empirical research on open innovation and co-creation: the IdeaStorm project by DELL,* Review of Management and Economic Engineering, Volume 13, No. 4 (54), 779-788, ISSN 1583-624X Revistă indexată în ULRICH'S Periodicals Directory, EBSCO Business Source(r) Complete database, Index Copernicus, Cabell's directory.

- **Lucrări publicate în volume ale congreselor internaţionale:**

39. A. Şerban, **L. Alexa,** V. Maier, R Crăciunescu (2021), Shaping the pathways to entrepreneurship. Entrepreneurial education in Romanian technical universities, 16th European Conference on Innovation and Entrepreneurship, ECIE 2021, 16-17 Septembrie, 2021, Lisabona, Portugalia, ISBN – 978-1-914587-09-2, pp. 883 – 891
40. L.C. SIMION, S. AVASILCAI, **E.L ALEXA (2021),** Transition Industry 4.0 to 5.0-Renaissance of Human Driven Approach Adding Value to People & Management Performance, *Strategica. Shaping the Future of Business and Economy*, ISBN: 978-606-749-579-9, pp. 897-917
41. Maier, V., **Alexa**, L., Craciunescu, T. (2020) *Online Education during the COVID19 Pandemic: Perceptions and Expectations of Romanian Students*, ECEL 2020 - Proceedings of the 19th European Conference on e-Learning, 28-30 October 2020, A Virtual Conference, ISBN: 978-1-912764-78-5. DOI:10.34190/EEL.20.147
42. **Alexa, E.L.,** Avasilcăi, S., Bujor, A. (2017) *Multiple Stakeholders's Co-Creation Process in New Product Development: An Exploratory Analysis*, Proceedings Of The Annual Session Of Scientific Papers IMT Oradea 2017, MATEC Web Conf. Volume 126, DOI: https://doi.org/10.1051/matecconf/201712604005
43. Tudose, B., **Alexa, E.L.,** (2017), *The Effect of Marketing Spending on Sales – An Empirical Analysis on the Automotive Industry*, Proceedings Of The Annual Session Of Scientific Papers IMT Oradea 2017, MATEC Web Conf. Volume 126, DOI: 10.1051/matecconf/201712604004
44. Bujor, A., Avasilcăi, S., **Alexa, E.L.,** (2017), *The Nature of the Creative Workforce*, Proceedings Of The Annual Session Of Scientific Papers IMT Oradea 2017, MATEC Web Conf. Volume 126, DOI: 10.1051/matecconf/201712604010
45. Pislaru, M., Avasilcăi, S., **Alexa, E.L.** (2017) *Urban recyclability: a creative approach based on fuzzy assessment,* 17th International Multidisciplinary Scientific Conference

SGEM 2017 Conference Proceeding Volume 17, pp. 267-274, ISSN 1314-2704, ISBN 987-619-7408-28-7.

46. **L Alexa**, M Alexa, S Avasilcăi, (2016) *Gaining a Competitive Edge through Action Design Research, ModTech International Conference - Modern Technologies in Industrial Engineering IV*, IOP Conf. Series: Materials Science and Engineering 145, DOI: 10.1088/1757-899X/145/6/062001.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Alexa, L., Apetrei, A., Sapena, J. (2020) *The Covid19 Lockdown Effect On The Intention To Purchase Sustainable Brands,* Globalization and Higher Education in Economics and Business Administration (GEBA 2020), 22nd to 23rd of October 2020, Iasi, Romania.
2. Asandului, A.L., Agheorghiesei, D. T., Alexa, L. Asandului, G. (2020) Students' Perspective on Education for Sustainability. Empirical Evidences from Two Universities, *LUMEN Conference - 4th LUMEN EDU International Online Scientific Conference | Education, Quality & Sustainable Development* | November 25th – 26th, 2020 | Targoviste, Romania
3. **Alexa, L.,** Avasilcăi, S., Pâslaru, M, (2016) The Impact of Social Media on Fashion Industry, *Proceedings of the 16th Romanian Textiles and Leather Conference* CORTEP, Iasi, Romania, ISSN 2285 – 5378

E. Brevete obţinute în întreaga activitate

K. Contracte de cercetare

Participare la contracte de cercetare/granturi în calitate de membru în echipa de proiect:
Contracte la nivel national

- 2023 – Erasmus+ KA2, 2022-1-FI01-K4220-HED-000090147 – *Inclusion to Digital Learning* (Dig2Ing). Contract nr. 23772/28.02.2023. 5 luni. Membru în echipa de implementare.
- 2023 - Erasmus + KA20HED, 2021-1-RO01-KA220-HED-000027527 – *Innovative smart textiles & entrepreneurship* (Hacktex). 6 luni. Membru în echipa de implementare.
- 2022 - SMIS 142152 – *Susținerea Tinerilor pentru afaceri reușite* (STAR). Contract de muncă nr. 22095 din 7.01.2022. 3 luni. Membru în echipa de implementare.
- 2022 – Grant intern Top-down, nr. GI-TD-DigitAll-10/2022. *Centru pentru Antreprenoriat în sectorul digital* (CEASeD). 6 luni. Membru în echipa de implementare.
- 2022 - Contract cercetare agent economic nr. 220607022 - East Marketing Insights. Valoare 31.063,76 lei (6339,54 Euro). Director de proiect.
- 2021 - Sustainable Entrepreneurship Summer School (SESS). Proiect nr. JAR2021_014 derulat în cadrul programului Universitatea Antreprenorială, finanțat de Romanian-American Foundation prin Junior Achievement Romania. Manager de proiect.
- 2020 - Sustainable Entrepreneurship Summer School (SESS). Proiect nr. JAR2020_018 derulat în cadrul programului Universitatea Antreprenorială, finanțat de Romanian-American Foundation prin Junior Achievement Romania. Manager de proiect.
- 2020 - 2021 Dezvoltarea culturii antreprenoriale a studenților de la inginerie și arhitectură prin crearea unei rețele de centre de pregătire în antreprenoriat-AntreprenorIng. Membru în echipa de implementare.

- 2020 - 2021 - Erasmus+:Skills4Smart TCLF Industries 2030, acronim TCLF, nr. 2017-3536/001-001. Membru în echipa de implementare.
- 2019 TCBL –Textile and Clothing Business Labs, Transformative Business Models for the Textile Clothing. Nr. proiect: SEP-210187456 Programul de finanțare: H2020-NMP-2014-two-stage
- 2019 - Contract CNFIS-FDI-2019-0021 Internaționalizarea Educației pentru Studenți la TUIASI - International Week for Phd Students and Researchers - Workshop on Social Entrepreneurship Education
- 2018-2020 - Erasmus+ 2017-1-ESO1-KA202-038419 - *Circular ECOnomy Innovative Skills in the TEXtile Sector* (ECOTEX).
- 2018-2019 - Erasmus+ 2017-1-UK01-KA202-036733 - *Boosting online cross-border sales of shoes through e-commerce coaching for SMEs from the shoe industry* (Boost4Shoes).
- 2017 – 2018 - CNFIS – FDI -2017 – 0206, *International la puterea t*, financed through the Institutional Development Fund 2016, National Council for Financing Higher Education, Domain 2: Romanian Higher Education Internationalization.
- 2017 – 2018 – PN-III-P2-2.1-PED-2016-0689, *Digital Innovation Model for Business Ecosystems from Creative Industries* - CRE@TIVE.BIZ, "Gheorghe Asachi" Technical University of Iasi.
- 2015 - Proiect PN-II-PT-PCCA-2013-4-1811 *"E-soluții de inovare prin implicarea pro-activa a clienților in crearea de valoare pentru creșterea competitivității organizaționale"* (E-PICUS), 2014-2016, contract nr. 322/2014, Membru în echipa de implementare.

Data:
9.09.2025

Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: ȘTIRBU CĂTĂLINA MIHAELA
Gradul didactic: conf. univ. dr
Instituția unde este titular: Universitatea Tehnică "Gheorghe Asachi"din Iași

A. Teza de doctorat

„CERCETĂRI PRIVIND IMPACTUL AEROSOLILOR SALINI ASUPRA PERFORMANȚEI ALERGĂTORILOR DE SEMIFOND",
2014, UNIVERSITATEA "ALEXANDRU IOAN CUZA" DIN IAȘI,
Domeniul ȘTIINȚA MEDIULUI,
Conducătorul de doctorat PROF. UNIV. DR. SANDU Ion.

B. Cărţi si capitole în cărţi publicate:

1. Ştirbu, I.C., **ȘTIRBU C.M.** - *Strategii de organizare a unei competiţii sportive majore*, Ed. Risoprint, Cluj-Napoca, 2023, ISBN 978-973-53-3150-4;
2. **ȘTIRBU C.M.**, SANDU I., ȘTIRBU I.C.., SANDU V.A. - *Aerosolii salini în îmbunătățirea performanțelor sportivilor*, EDITURA UNIVERSITĂȚII AL. I. CUZA din IASI, ISBN 978-606-714-179-5, 2015
3. **ȘTIRBU C.M.,** - *Îndrumar metodic pentru studenții din învățământul cu profil tehnic, pentru anul I+II, Ed. PIM,* ISBN 978-606-13-5192-3, IASI, 2019.
4. **ȘTIRBU C.M.,** - *Curs de volei pentru studenții din învățământul superior cu profil tehnic, anul II, Ed. PIM,* ISBN 978-606-13-5191-6, IASI ,2019.
5. **ȘTIRBU C.M.,** - *Curs de volei pentru studenții din învățământul superior cu profil tehnic, anul I, Ed. PIM,* ISBN 978-606-13-5190-9, IASI, 2019

C. Lucrări indexate ISI/BDI publicate

1. Stirbu I. C., Ionite C., **STIRBU C. M.**, Condurache I., Rotariu M., *Traumatology and functional recovery of the shoulder specific to the game of Volleyball,* Romanian Association of Balneology, eISSN 2734-8458, http://bioclima.ro/Journal.htm , DOI 10.12680/balneo.2022.531, ISI Emerging Sources Citation Index, Journal Impact Factor:1,5,
2. Szabo-Alexi M., Mihaescu C., Stirbu I. C., **STIRBU C.M.,** , Szabo-Alexi P., *Comparative study on analysis of the volleyball team service,* Analele Universităţii din Oradea Facicula Educaţie Fizică şi Sport, eISSN 2286 – 2870, volum XXXII,, Indexed in IndexCopernicus,,DOAI,Worldcat,SCIPIO,EuroPub, https://www.fefs.uoradea.ro/Fascicula_Educatie_Fizica_si_Sport/2022/3.FEFS_2022_Szabo.pdf ,
3. I. C. Stirbu, **C.M. STIRBU** - *The influence of covid 19 on the physical condition of primary school children*, BULETINUL INSTITUTULUI POLITEHNIC IASI, SECTIA STIINTE SOCIO-UMANE, Vol. 67 (71), nr. 3-4, 2021, indexed IN: CEEOL, FABULA.

4. **C. M. Stirbu**, I.C. Stirbu - *Study on Improving Freshmen's Skills Through Means and Methods Specific to Volleyball* , BULETINUL INSTITUTULUI POLITEHNIC IASI, SECTIA STIINTE SOCIO-UMANE, Vol. 66 (70), nr. 3-4, 2020, indexed IN: CEEOL, FABULA.
5. I. C. Stirbu, **C. M. Stirbu** - *Study of the Use of Means to Prevent Injuries in Volleyball*, BULETINUL INSTITUTULUI POLITEHNIC IASI, SECTIA STIINTE SOCIO-UMANE, Vol. 66 (70), nr. 3-4, 2020, indexed IN: CEEOL, FABULA
6. **C. M. Stirbu**, I.C. Stirbu - *Volleyball from the mountains to the beach* ,Buletinul Institutului Politehnic Iasi, Sectia Stiinte Socio-Umane, Vol. 67(71), nr. 3-4, 2021
7. Sandu, I., Olariu, R.I., Sandu, I.G., **Stirbu, C.M.**, Pascu, C., Vasilache, V., Davide, Vione, Arsene, C., - *Investigation on the dynamics and kinetics involved in saline aerosol generation under air erosion of pure and contaminated halide salts,* Journal of Aerosol Science, Volume 81, March 2015, Pages 100–109, 2014, I.F. = 2.705
8. **Ştirbu C.M.,** Ştirbu I. C. , Sandu I., - *Impact Assessment of Saline Aerosols on Exercise Capacity of Athletes*, Procedia – Social and Behavioral Sciences, Elsevier (ISSN 1877-0428), 46, 2012, pp. 4141-4145, I.F. = 0.292.
9. ŞTIRBU I. C., **ŞTIRBU C. M.** – *Improving the serve efficiency in volleyball using tai chi-qi gong oriental techniques*, BULETINUL INSTITUTULUI POLITEHNIC IAŞI, SECŢIA ŞTIINŢE SOCIO-UMANE, Vol. 64 (68), nr. 3-4, 2018, indexed from 2011 IN: ZENTRALLBLAT, INDEX COPERNICUS, EBSCO.
10. ŞTIRBU I. C.; **ŞTIRBU C. M.,** - *Statistical registration of individual action in attack for young volleyball players*, SPORT & SOCIETY / REVISTA SPORT SI SOCIETATE. Special Issue, Vol. 16, p112-116, 2016. http://www.sportsisocietate.ro/articol/nregistrarea-statistic-a-ac-iunilor-individuale-n-atac-n-voleiul-juvenil/347 (p-ISSN 1582-2168, e-ISSN 2344-3693) BDI – INDEXCOPERNICUS, EBSCO SPORTSDiscus, Academic Journals Database.
11. ŞTIRBU I. C.; **ŞTIRBU C. M.**, - *Study on the influence of environmental factors, especially saline aerosols on the effort capacity of athletes*, SPORT & SOCIETY / SPORT SI SOCIETATE, Special Issue, Vol. 14, p250-256, 2014. http://www.sportsisocietate.ro/articol/studiu-privind-influen-a-factorilor-de-mediu-din-saline-n-special-a-aerosolilor-n-dezvoltarea-capacit-ii-de-efort-a-sportivilor/250, BDI – INDEXCOPERNICUS, EBSCO SPORTSDiscus, Academic Journals Database,
12. **ŞTIRBU C. M.** – *Study regarding the use of salt mine environment factors – especially salt aerosols – in developing the effort capacity of athletes. I. Theoretical aspects,* BULETINUL INSTITUTULUI POLITEHNIC IAŞI, SECŢIA ŞTIINŢE SOCIO-UMANE, Tome LIX (LXIII), Fasc.1-2, 2013, indexed from 2011 IN: ZENTRALLBLAT, INDEX COPERNICUS, EBSCO
13. Poliacu I., **Ştirbu C.M.,** - *Study Regarding the Particularities of the Force-Detention Development Within the Annual Training Plan for Jumping Tests at the Advanced Group,* publicată în Buletinul Institutului Politehnic din Iaşi, 2012, secţia Ştiinţe socio-umane, Tomul LVIII(LXII), Fasc. 1-2, ISSN 1224-5860.
14. ŞTIRBU I. C., **ŞTIRBU C. M.,** - *Study on individualizing the training of the spiker (volleyball – female juniors),* GYMNASIUM: Scientific Journal Of Education, Sports and Health, 1, supplement, XIII, 2012, pp.344-350, ISSN 1453-0201.
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Data:
30 septembrie 2025

Semnătura,

A.3.3.c - Lista de lucrări

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Numele şi prenumele: **Ostafi Silviu Florin**

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11. Botan, F. Ostafi, A. Onea, *Free and Fixed End-Point Optimal Control Problems for Linear Systems with Exogenous Variables*, Proceedings of the 5th WSEAS/IASME International Conference on Systems Theory and Scientific Computation (ISTASC '05), (CD-ROM) ISBN 960-8457-35-1, Malta, September, 2005.
12. C. Botan, F. Ostafi, *Discrete-Time Free and Fixed End-Point Optimal Control Problem*, Proceedings of Intelligent Control Systems and Optimization, Vol. I, pp. 170-175, ISBN: 972-8865-29-5, ICINCO – 2005, Barcelone, Spain, September 2005.
13. Botan, F. Ostafi, *Energetic Aspects Referring to Electrical Drive Systems*, Proceedings of 5th WSEAS/IASME International Conference on Electric Power Systems, High Voltages, Electric Machines (POWER '05), (CD-ROM) ISSN 1790-5117, ISBN 960-8457-38-6, Tenerife, Spain, December 2005.
14. F. Ostafi, C. Botan, A. Onea, *Discrete Time Free and Fixed End-Point Optimal Control Problems for Perturbed Linear Systems*, Proceedings of 4th WSEAS / IASME International Conference on System Science and Simulation in Engineering (ICOSSSE 2005), (CD-ROM) ISSN 1790-5117, ISBN 960-8457-38-6, Tenerife, Spain, December 2005.
15. C. Botan, F. Ostafi, A. Onea, *Discrete Optimal Control with Fixed End-Point for an Electrical Drive System*, Proceedings of 11th International Power Electronics and Motion Control Conference, EPE PEMC, Riga, Vol. 4, pp.344-348, Sept. 2004.

16. C. Botan, F. Ostafi, A. Onea, *Linear Quadratic Optimal Control of an Electrical Drive System*, 10th International Power Electronics and Motion Control Conference, EPE-PEMC 2002, Dubrovnik, Croatia, CDROM, 2002.
17. C. Botan, A. Onea, F. Ostafi, *A Solution to the LQ-Problem with Finite Final Time*, WSES Int. Conf on Automation and Information (AITA 2001), Skiatos, Greece, CDROM, 2001

Articole/studii publicate în volumele unor manifestări ştiinţifice internaţionale recunoscute, desfăşurate în ţară
1. C. Botan and F. Ostafi, *Solution to Riccati Difference Equations for Discrete Time-Variant Optimal Control Problems*, Proceedings of 9th International Carpatian Control Conference, Sinaia, May 2008, pp. 77-80, ISBN 978-973-746-897-0, 2008.
2. F. Ostafi, C. Botan, *Non-Variational Solution to the Optimal Tracking Problem for Linear Systems*, Proceedings of 9th International Symposium on Automatic Control and Computer Science – Iasi, Romania, Nov. 16-18, 2007, pp. 207-211, 2007.
3. F. Ostafi, C. Botan, *Optimal Control of the Drive Systems with Two Control Variables*, International Symposium on Automatic Control and Computer Science, SACCS'04, Iaşi, Romania, CDROM, 2004..
4. Botan, F. Ostafi, A. Onea, *A Solution to the Discrete Linear Quadratic Optimal Problem*, Proceedings Of 7th International Symposium on Automatic Control and Computer Science, Iaşi, Romania, CDROM, 2001.

J. Invenţii.

K. Contracte de cercetare/granturi.
1. Membru proiect DIGITAL-2021-EDIH-01, Digital Innovation Zone EDIH - Manufacturing & Smart Health for better business, life and health in the North East Romania region, Manager proiect: conf.dr.ing. Simona Caraiman
2. Membru proiect POCU/626/6/13/ID:131181 / Insertia absolventilor prin stagii de pregatire PRACtica moderne şi eficiente din cadrul Universităţii TEHnice Gheorghe Asachi din Iaşi, pe piaţa muncii - PRACTEH
3. Membru proiect POCU/320/6/21/122333 / Oferte educaţionale noi şi flexibile în învăţământul terţiar universitar şi non-universitar tehnic conforme cu cerinţele pieţei muncii în schimbare
4. Membru proiect POSDRU/81/3.2/S/53084, Creşterea competitivitatii întreprinderilor prin perfecţionarea si specializarea resurselor umane in domeniul noilor tehnologii, într-o societate bazată pe cunoaştere si pentru o dezvoltare durabilă, Responsabil UTI prof. Dr. Ing. Corneliu Lazar.
5. Membru proiect POSDRU/86/1.2/S/63806, Reţea naţională de centre pentru dezvoltarea programelor de studii cu rute flexibile şi a unor instrumente didactice la specializarea de licenţă şi masterat, din domeniul Ingineria Sistemelor, Responsabil UTI prof. Dr. Ing. Mihail Voicu.
6. Membru contract A consorţiu 194/2006 (durata 3 ani), Reţele de distribuţie de curent continuu pentru aplicaţii industriale – DCnet, Responsabil UTI prof. dr. ing. Corneliu Boţan.
7. Membru grant CEEX – MENER, 603/2005 (durata 3 ani), Metode avansate de control pentru eficientizarea producerii şi utilizării energiei, Director Grant prof. dr. ing. Corneliu Boţan.
8. Membru GR80/2007, Dezvoltarea si implementarea unor metode moderne pentru controlul miscarii, Director grant prof. dr. ing. Alexandru Onea.
9. Membru grant CNCSIS 33371/2004, Metode moderne de control aplicate sistemelor de acţionare electrică, Director Grant prof. dr. ing. Corneliu Boţan.
10. Membru grant CNCSIS 33557/2003, Tehnici avansate aplicate în controlul sistemelor de acţionare electrică, Director Grant prof. dr. ing. Corneliu Boţan.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 29/09/2025

Şef lucrări dr. Ing. Ostafi Silviu Florin
Semnătura:

Anexa II.09.b – Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență
Ingineria sistemelor

Numele și prenumele: **Ioan Aleodor-Daniel**

A. Teza de doctorat:

- **A.D. Ioan**, *Contribuţii la implementarea structurilor hardware cu circuite numerice programabile CPLD şi FPGA*, domeniul Ştiinţa Calculatoarelor, Univ. Tehnică "Gh. Asachi" Iaşi, conducător ştiinţific *prof.dr.ing. Valachi Alexandru*, 2010.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS):

- **A.D. Ioan**, *Bazele funcționării și programării calculatoarelor, ediția a II-a (revizuită și completată),* ISBN 978-973-621-498-1, Ed. Politehnium, Iaşi, 2021.
- **A.D. Ioan**, *Arhitectura și programarea microcontrolerelor PIC*, ISBN 978-973-621-489-9, Ed. Politehnium, Iaşi, 2020.
- **A.D. Ioan**, *Bazele programării şi funcţionării calculatoarelor*, ISBN 978-973-621-430-1, Ed. Politehnium, Iaşi, 2014.
- **A.D. Ioan**, C. Lazăr, *Transmisia Datelor: consideraţii teoretice şi experimente de laborator*, ISBN 978-973-621-272-7, Ed. Politehnium, Iaşi, 2009.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

- **A.D. Ioan**, G. Mihalache, *Îndrumar pentru laboratorul de Informatică aplicată*, 2019.
- **A.D. Ioan**, M. Postolache, *Îndrumar pentru laboratorul de sisteme cu microprocesoare*, 2009.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale:

I1. Lucrări în reviste cotate ISI:

- **A.D. Ioan**, *New Techniques for Implementation of Hardware Algorithms inside FPGA Circuits*, Advances in Electrical and Computer Engineering (indexed in ISI Thomson Reuters, impact factor: 0.688/2010), ISSN 1582-7445, no. 2, vol. 10, pp. 16-23, 2010.

I2. Lucrări în reviste indexate BDI:

- **A.D. Ioan**, *Algorithmic Solution for Design and Optimisation of Multi-Phase Pulse Generators*, Bulletin of the Iasi Polytechnic Institute, Automatic Control and Computer Science Section (indexed in Zentralblatt MATH), ISSN 1220-2169, no. LVII (LXI), vol. 3, pp. 43-59, 2011.
- V. Vasiliu, **A.D. Ioan**, *Modern Microcontrollers as Virtual Devices for Old Microprocessor Systems*, Bulletin of the Iasi Polytechnic Institute, Automatic Control and Computer Science Section (indexed in Zentralblatt MATH), ISSN 1220-2169, no. LV (LIX), vol. 2, pp. 39-50, 2009.
- **A.D. Ioan**, *Data Storage Method for Systems with 8-bit Microprocessors or Microcontrollers*, Bulletin of the Iasi Polytechnic Institute, Automatic Control and Computer Science Section, (indexed in Zentralblatt MATH), ISSN 1220-2169, no. LIV (LVIII), vol. 3-4, pp. 27-40, 2008.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS (sau CNCS).

I. Lucrări ştiinţifice publicate în volumele conferinţelor:

I1. Lucrări la conferinţe indexate ISI:

- G. Mihalache, **A.D. Ioan**, *FPGA Implementation of BLDC Motor Driver with Hall Sensor Feedback*, IEEE International Conference and Exposition on Electrical and Power Engineering, Iasi, october 18-19, 2018.
- **A.D. Ioan**, M.C. Ignat, *FPGA Autonomous Logic Analyzer Using Innovative BERC Filter Optimization*, IEEE International Conference on Electronics, Computers and Artificial Intelligence, Bucharest, june 25-27, 2015.
- B.C. Alecsa, **A.D. Ioan**, *FPGA Implementation of a Sinusoidal PWM Generator with Zero Sequence Insertion*, IEEE International Symposium on Advanced Topics in Electrical Engineering, Bucharest, may 12-14, 2011.
- B.C. Alecsa, **A.D. Ioan**, *FPGA Implementation of a Matrix Structure for Integer Division*, IEEE International Symposium on Electrical and Electronics Engineering, Galati, september 16-18, 2010.
- **A.D. Ioan**, *Designing an Optimal Single Chip FPGA Video Interface for Embedded Systems*, IEEE International Symposium on Electrical and Electronics Engineering, Galati, september 16-18, 2010.

I2. Lucrări la conferinţe indexate BDI:

- **A.D. Ioan**, *Designing the Synchro-Generator of an FPGA or CPLD Video Interface for Micro-Systems*, International Conference on Development and Application Systems, Suceava, may 22-24, 2008.
- **A.D. Ioan**, *Optimal Hardware Interface for Connecting Hard Disk and CD-ROM Drives to 8-bit Microsystems*, International Symposium on Automatic Control and Computer Science, Iasi, november 16-18, 2007.

J. Invenţii.

K. Contracte de cercetare:

- *Platformă GIS integrată pentru analiza, proiectarea, simularea şi optimizarea funcţionării reţelelor de alimentare cu apă şi de canalizare* (GISHIDRO) - contract nr. 63 (CEEX-II 03) / 2006 (director program prof.dr. ing. Dan Gâlea).

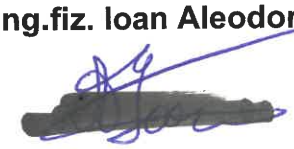
L. Premii, distincţii.

M. Alte realizări semnificative:

- ***A.D. Ioan***, *The Ultimate HC Mainboard Modification Guide (second edition)*, articol publicat pe site-ul de retro-computing "Romanian Home Computers" în 2025.
- ***A.D. Ioan***, *The Ultimate HC Extension Modification Guide (second edition)*, articol publicat pe site-ul de retro-computing "Romanian Home Computers" în 2024.
- ***A.D. Ioan***, *HC-Norton 8.1*, program de gestiune fișiere optimizat în asamblare pentru maximum de viteză, publicat împreună cu codul-sursă pe site-ul de retro-computing "Romanian Home Computers" în 2024 (*versiunea 6.1 din 1997 a fost folosită în unele unități de învățământ preuniversitar* din România dotate cu calculatoare HC-2000).

Data: **26/09/2025**

Șef.lucr.dr.ing.fiz. Ioan Aleodor-Daniel

Semnătura: 

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Brăescu Florin Cătălin

A. Teza de doctorat.
"Algoritmi de planificare pentru sisteme de timp real încorporate", conducător ştiinţific prof.dr.ing. Corneliu Lazăr, 2013

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.
Lazar, C., Panescu, D., Laczko, A., **Braescu, C.**, 2004, Vision-Based Integrated System for Robotic Assembly, Preprints of IFAC International Workshop on Intelligent Assembly and Disassembly, 2003, Bucuresti, Eds. Borangiu T., Kopacek P., Elsevier, ISBN 0-08-044065-7, pg. 113 - 118 (capitol în carte).

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.
1. C. Brăescu, Aplicaţii Internet, note de curs, ai.ac.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.
1.C. Agrigoroaie, L. Ferariu, **C. Braescu**, Reflective Online reconfiguration of RealTime Applications Having Tasks With Static Priorities, Tome LVIII (LXII), Fasc. 1, 2012, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, pp. 9-26, ISSN 1220 – 2169, http://www.ace.tuiasi.ro/index.php?page=678#archive
2.**C. Braescu**, L. Ferariu, Real-time Constraints Monitoring for OSEK applications, Buletinul Institutului Politehnic din Iaşi, Tome LVII (LX), Fasc. 1, 2011, AUTOMATIC CONTROL and COMPUTER SCIENCE Section, ISSN 1220 – 2169, http://www.ace.tuiasi.ro/index.php?page=678#archive
3.**C. Braescu**, L. Ferariu, OSEK Based Embedded Control Systems Using Schedule Feasibility Self-testing, Buletinul Institutului Politehnic Iasi, 2009, tomul LV (LIX), fasc.2, pp. 29-38 , ISSN 1220-2169,
http://www.ace.tuiasi.ro/index.php?page=678#archive
4. D. Gheorghita, I. Vintu, L.Mirea, **C. Braescu**, "Quadcopter Control System. Modelling and Implementation", ICSTCC 2015, Fundata, Romania.
5. Caruntu C.F., **F.C. Braescu**, A. Maxim, R.C. Rafaila, and A. Tiganasu, Distributed model predictive control for vehicle platooning: A brief survey, 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2016, pp. 644–650.
6. **F.C. Braescu**, Basic control algorithms for vehicle platooning prototype model car, 21st International Conference on System Theory, Control and Computing, Sinaia, Romania, 2017.
7. **F.C. Braescu**, L. Ferariu, C. Lazar, Multi-domain CAN Gateway with Monitoring Capabilities, Journal of Control Engineering and Applied Informatics, ISSN 1454-8658,16(2), 49-57, 2014.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Panescu, D., Voicu, M., Dumbrava, St., Porumb, G., Rosioru, R., **Braescu**, C., Dorin, V., 2001, The development of an FMS for CIM education, Buletinul Institutului Politehnic Iasi, Tomul XLVII (LI), Fasc. 1-4, Automatica si Calculatoare, pg. 75 – 83, ISSN 1220 2169.

2. Panescu, D., Lazar, C., Dumbrava, St., **Braescu**, C., 2005, An Artificial Intelligence Approach to Flexible Manufacturing Systems, Memoriile Secţiilor Ştiinţifice, Secţia IV, Tomul XXV, Editura Academiei Romane, Bucureşti, pg. 271 – 286, ISSN 1224-1407, ISBN 973-27-1105-1, ISBN 973-27-0971-5 (INSPEC).

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Pănescu, D., Lazăr, C., Dumbravă, Şt., **Brăescu**, C., 1999, Metode avansate de conducere a roboţilor şi sistemelor flexibile de fabricaţie, Workshop "Roboţi mobili", Universitatea din Craiova, 29-30 octombrie.

2. Panescu, D., Voicu, M., Dumbrava, St., Ifrim, S., **Braescu**, C., Ninu, A., 2000, A Vision based Robot Control Module Integrated in a Training CIM System, Proceedings of the 3rd Working Conference on Engineering Education For The 21st Century, Sheffield, Anglia, pg. 199 – 204, ISBN 0-86339-905-3.

3. Porumb, G., Rosioru, R., Dumbrava, St., Panescu, D., **Braescu**, C., 2001, An information system for a CIM laboratory. A case study, Proceedings of the 7th International Symposium on Automatic Control and Computer Science, Iasi, (pe CD-ROM), ISBN 973-8292-11-5.

4. **Braescu**, C., Lazar, C., 2001, Teaching Computer Vision With OptiMaster System, Proceedings of the 7th International Symposium on Automatic Control and Computer Science, Iasi.

5. **Braescu**, C., Johannsen, G., 2001, Extension of a Robot Simulation Environment For Sound Communication in a Supermarket Scenario, Proceedings of the 7th International Symposium on Automatic Control and Computer Science, Iasi.

6. Panescu, D., Dumbrava, St., **Braescu**, C., Dorin, V., 2002, Asupra unor posibilitati de utilizare a robotilor industriali intr-o celula flexibila de fabricatie, Conferinta Nationala de Robotica, CNR 2002, Editura Universitaria, Craiova, pg. 65 –70, ISBN 973-8043-165-5.

7. Panescu, D., Lazar, C., Dumbrava, St., **Braescu**, C., 2002, On Artificial Intelligence Use In Flexible Manufacturing Systems, Preprints of the Symposium on Intelligent Software and Control Systems, Iasi.

8. Lazar, C., Laczko, A., **Braescu**, C., 2002, An Assembly Application Using A Vision Guided Robot, Conferinta Nationala de Robotica, Craiova.

9. **Braescu, C.**, Ferariu, L., Lazar, C., *OSEK-Based Multiple Controllers with Schedule Feasibility Self-testing*, Proc. IEEE International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2010), Pisa, Italia, 2010.

10. **Braescu, C.**, Ferariu, L., *Run-time Feasibility Verification in Event Driven Operating Systems with Static Priorities*, Proc. 14th International Conference on System Theory and Control (ICSTC 2010), Sinaia, România, 2010.

11. **Braescu C.**, Ferariu L., Franciuc A., *Monitoring CAN Performances in Distributed Embedded Systems*, 15th IEEE International Conference on System Theory, Control and Computing, Sinaia 2011.

12. **Braescu C.**, Ferariu L., Nacu A., *OSEK-Based Gateway Algorithm for Multi-Domain CAN Systems*, IEEE International Conference on Intelligent Computer Communication and Processing, Cluj, August, 2011.

13. **Braescu C.**, Caruntu C.F., Ferariu L., Lazar C., *OSEK Based Embedded Networked Controller Handling Communication Delays*, 2nd IEEE Eastern European Regional Conference on the Engineering of Computer Based Systems, Bratislava, Slovakia, September, 2011.
14. Caruntu C.F., Onu D., **Braescu C.**, Lazar C., *Model Predictive Control for Real-Time Simulation of a Network-Controlled Vehicle Drivetrain*, 2nd IEEE Eastern European Regional Conference on the Engineering of Computer Based Systems, Bratislava, Slovakia, September, 2011.
15. **Braescu C.**, Ferariu L., *Multi-Domain CAN Gateway for Complex Manufacturing Environments*, ModTech International Conference (Modern Technologies, Quality and Innovation - New face of TMCR), Sinaia, May 2012.
16. **Braescu C.**, Ferariu L., Gilca R., Bordianu V., *Ball on plate balancing system for multi-discipline educational purposes*, 16th IEEE International Conference on System Theory, Control and Computing, Sinaia 2012.
17. Caruntu C.F., **F.C. Braescu**, A. Maxim, R.C. Rafaila, and A. Tiganasu, Distributed model predictive control for vehicle platooning: A brief survey, 20th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2016, pp. 644–650.
18. Caruntu C.F. and **F.C. Braescu**, Further analysis on network-induced time-varying delay modeling methods used in GPC design, in Joint International Conference OPTIM-ACEMP, Brasov, Romania, 2017.
19. **Braescu F.C.** and C. F. Caruntu, Prototype model car design for vehicle platooning, in Joint International Conference OPTIM-ACEMP, Brasov, Romania, 2017, pp. 953–958.
20. Mihalache G., Livint G., **F.C. Braescu** and Donose C., A XIX-a Conferinta Nationala de Actionari Electrice, CNAE 2018, 7-8 iunie, 2018, Iasi, Romania.

J. Invenţii.

K. Contracte de cercetare/granturi.

Programul/Proiectul	**Funcţia**	**Perioada:**
Sistem integrat de laboratoare pentru studiul domeniului fabricaţiei asistate de calculator, Proiect major universitar, Contract nr. 41861/4.11.1999, cod CNFIS 0006, valoare 193 136 USD	Membru proiect	1999 - 2002
Utilizarea sistemelor de vedere artificială în conducerea roboţilor industriali – Metode de conducere a roboţilor industriali utilizând informaţii senzoriale extrase din imagini, Contract nr. 34280/1999, Tema nr. 32, cod CNCSIS 264, valoare 50 000 000 lei.	Membru proiect	1999
Analiza şi implementarea unor metode avansate de conducere a fabricaţiei, Contract nr. 37089/2000, Tema nr. 33, cod CNCSIS 942/2000, valoare 40 000 000 lei; Contract nr. 35259/2001, Tema nr. 17, cod CNCSIS 79/2001, valoare 40 000 000 lei.	Membru proiect	2000 - 2001
Platforme robot-vedere artificiala autonome, inteligente de calificare, sortare/prelucrare/ambalare si inspectie de calitate a produselor cu arhitectura de control holonic, orientata pe servicii, bazata pe trasaturi (SOFHICOR), Universitatea Tehnică Iaşi – Grant PNII, contract nr. 11-042 / 18.09.2007, valoare etapa 2007: 50000 lei.	Membru proiect	2007 - 2009

Tehnologii informatice de timp real pentru sistemele incorporate care asigura controlul lantului de transmisie a puterii la autovehicule (SICONA)	Membru proiect	2008-2011
Contract nr. 273/01.10.2015, cu titlul Control predictiv bazat pe agenţi pentru plutoanele de autovehicule având codul PN-II-RU-TE-2014-4-0970 în cadrul Programului PN II Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea constituirii de tinere echipe de cercetare independente, finanţat de Unitatea Executivă pentru Finanţarea Învătământului Superior, a Cercetării, Dezvoltării şi Inovării (UEFISCDI), contract nr. 273/01.10.2015.	Membru proiect	2015-2017

L. Premii, distincţii.

M. Alte realizări semnificative.

Membru al Centrului de Cercetare Automatică şi Informatică Aplicată din Universitatea Tehnică Gh. Asachi Iaşi (centru acreditat CNCSIS)

Data: 28/09/2025

Ş.I. dr. ing. Florin Cătălin Brăescu:
Semnătura: [redacted]

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Mocanu Răzvan

A. Teza de doctorat.

R. Mocanu, *Control Techniques and Modeling of Automotive Electrical Drives / Tehnici de modelare și control a acționărilor electrice utilizate în autovehicule*, Coordonator doctorat prof.univ.dr.ing. Alexandru Onea, Universitatea Tehnică „Gh. Asachi" din Iași, Facultatea de Automatică și Calculatoare, 2018.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

- Răzvan Mocanu, Alexandru Onea ,Control and Diagnosis of Electric Machines , Politehnium 2020

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F.Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

- Răzvan Mocanu, Alexandru Onea, "Robust control of permanent magnet synchronous machine based on passivity theory", Asian Journal of Control, DOI: 10.1002/asjc.1699, 2017;
- SD Achirei, R Mocanu, AT Popovici, CC Dosoftei, Model-predictive control for omnidirectional mobile robots in logistic environments based on object detection using CNNs, Sensors 23 (11), 4992
- Răzvan Mocanu, Alexandru Onea, A passive-constrained observer and controller applied to an in-wheel synchronous machine implemented on a fixed-point DSP, Mathematics 11 (8), 1860
- R Mocanu, A Onea, CC Dosoftei, A combined model and data-driven approach for the determination of rotor temperature in an induction machine, Sensors 21 (13), 4512

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

- Răzvan Mocanu, Alexandru Onea, "Phase resistance estimation and monitoring of PMSM used in electrical vehicles", 18th International Conference System Theory, Control and Computing (ICSTCC), pp. 512-519, Sinaia, Romania, Oct. 2014;

- Răzvan Mocanu, Alexandru Onea, "Temperature estimation for condition monitoring of PMSM used in electric vehicles", International Symposium on Fundamentals of Electrical Engineering (ISFEE), pp. 1-6, Bucuresti, Romania, Noi. 2014;

- Răzvan Mocanu, Alexandru Onea, "Passivity based torque control of PMSM used in electrical vehicles", 19th International Conference System Theory, Control and Computing (ICSTCC), pp. 803-810, Cheile Gradistei, Romania, Oct. 2015;

- Răzvan Mocanu, Alexandru Onea, "Robust control of externally excited synchronous machine based on passivity theory", 24th Mediterranean Conference on Control and Automation (MED), pp. 473-478, Athens, Greece, Iun. 2016;

- Răzvan Mocanu, Alexandru Onea, "Simple adaptive control of externally excited synchronous machine", 20th International Conference System Theory, Control and Computing (ICSTCC), pp. 555-560, Sinaia, Romania, Oct. 2016;

- Răzvan Mocanu, Alexandru Onea, "Simple adaptive voltage control of permanent magnet synchronous machine", 21th International Conference System Theory, Control and Computing (ICSTCC), pp. 158-162, Sinaia, Romania, Oct. 2017;

- Răzvan Mocanu, Alexandru Onea, "Robust optimal control of externally excited synchronous machine based on passivity theory", 18th International Carpathian Control Conference (ICCC), pp. 162-166., Sinaia, Romania, Mai 2017;

- Răzvan Mocanu, Alexandru Onea, "Determination of stator temperature for thermal protection in a Permanent Magnet Synchronous Machine", 25th Mediterranean Conference on Control and Automation (MED), pp. 1321-1325, Valetta, Malta, Iul. 2017;

- Răzvan Mocanu, Alexandru Onea, "An Adaptive Control Strategy for Permanent Magnet Synchronous Machines", International Symposium on Fundamentals of Electrical Engineering 2018, Bucharest, Romania, Noi 1–2, 2018

- Răzvan Mocanu, Alexandru Onea, "Indoor and Outdoor Vehicle Localization using UWB Transceivers", 27th Mediterranean Conference on Control & Automation, 1-4 Iul. 2019, Akko, Israel

- Răzvan Mocanu, "Determinarea temperaturii statorului mașinii sincrone cu magneți permanenți în vederea protecției termice", Conferința școlilor doctorale, TUIasi, 29-30 Mai, 2017

- R Mocanu, A Onea, The detection of the rotor temperature in an induction machine based on a neural network with particle filtering 2020 28th Mediterranean Conference on Control and Automation (MED), 1099-1103

- R Mocanu, A Onea,A Cross-Correlation Based Method for Open Phase Fault Detection in Multi-phase Electric Machines

2020 28th Mediterranean Conference on Control and Automation (MED), 544-549

- R Mocanu, RC Rafaila, A Onea, Predictive control of pmsm in stator frame under passivity constrain 2020 24th International Conference on System Theory, Control and Computing 2020 , 898-903

- Răzvan Mocanu, Alexandru Onea, Predictive Robust Control of PMSM with Dissipative Constrain 2020 Australian and New Zealand Control Conference (ANZCC), 188-192

- Răzvan Mocanu, Alexandru Onea,, Robust Control of a Three-Phase Synchronous In-wheel Motor, IFAC-PapersOnLine 54 (20), 632-637

- Răzvan Mocanu, Alexandru Onea, Model-free Control of Passive Systems with Application to In-Wheel Synchronous Machine Control, 2022 IEEE 31st International Symposium on Industrial Electronics (ISIE 2022), 1059-1063

- Răzvan Mocanu, Alexandru Onea, Model-free Control Under Passivity Constraint Applied to BLDC control, 2022 26th International Conference on System Theory, Control and Computing 2022, 386-391

- R Mocanu, S Achirei, C Dosoftei, T Popovici, A Simplified-Model Predictive Controller Design for a Four-Wheel Omnidirectional Robot, International Symposium on Measurements and Control in Robotics, 181-191

J. Invenţii.

METHOD AND SYSTEM FOR DETECTING AN OPEN PHASE FAULT IN A MULTI-PHASE ELECTRIC MACHINE
R Mocanu
EP Patent EP3156811A1

Method for predicting a fault on an actuator in a vehicle and application-specific circuit for implementing such a method
R Mocanu
DE Patent DE102019200600B3

K. Contracte de cercetare/granturi.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 28/09/2025

Sef.lucr.dr.ing. Răzvan Mocanu:
Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Grosu Gabriela
Gradul didactic: lector doctor matematică
Instituţia unde este titular: Universitatea Tehnică Gheorghe Asachi din Iaşi
Facultatea de Automatică şi Calculatoare, Departamentul de Matematică şi Informatică

A. Teza de doctorat:
„Ecuaţii de Evoluţie cu Date Măsuri", coordonator ştiinţific prof. univ. dr. Ioan I. Vrabie. Susţinută public la Universitatea „Al. I. Cuza", Iaşi, la 21 septembrie 2007. Confirmarea titlului de doctor s-a făcut prin Ordinul Ministrului nr. 3439/12.03.2008, pe baza rezoluţiei C.N.A.T.D.C.U. întrunit la data de 25.02.2008.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:-

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

Lecţii de Analiză Funcţională cu Aplicaţii în Teoria Matematică a Sistemelor, UPB , 2012, autori: Mircea Olteanu, Gavril Păltineanu, Marcel Roman, Gabriela Grosu, Luminiţa Costache http://www.edumanager.ro/community/documente/analiza_functionala.pdf

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

Teste admitere-Facultatea de Automatică şi Calculatoare, Domeniul Calculatoare şi Tehnologia Informaţiei pe http://www.ace.tuiasi.ro/users/103/book_teste_2014.pdf

Culegere de probleme pentru admitere, Universitatea Tehnică "Gh. Asachi" Iaşi, Facultatea de Automatică şi Calculatoare, Editura PIM, Iaşi, 2016 , ISBN 978-606-13-3075-1, autori : Narcisa Dumitriu, Gabriela Grosu, Silviu-Cătălin Nistor, Ariadna Lucia Pletea, Marcel Roman, Radu Strugariu

Culegere de probleme pentru admitere, Universitatea Tehnică "Gh. Asachi" Iaşi, Facultatea de Automatică şi Calculatoare, Editura PIM, Iaşi, 2019 , ISBN 978-606-13-4754-4, autori : Narcisa Dumitriu, Gabriela Grosu, Silviu-Cătălin Nistor, Marian Panţiruc, Ariadna Lucia Pletea, Marcel Roman, Radu Strugariu

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

Cursuri şi Seminarii de Analiză Matematică, Cursuri şi Seminarii de Matematici Speciale, Seminarii de Algebră liniară şi Geometrie Analitică publicate pe http://math.etti.tuiasi.ro/ggrosu/

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

G. Grosu, *Compactness Results for L^∞-Solution Operator of a Linear Evolution Equation Involving Measures*, Nonlinear differ. equ. appl. (NoDea) (ISI) Abstracted/Indexed in: Journal Citation Reports-Science, Mathematical Reviews, MathSciNet, Science Citation Index Expanded, SCOPUS, Zentralblatt Math, ISSN: 1021-9722 (print version), ISSN: 1420-9004 (online version)), 14 (2007), p. 411-428.
Zbl 1163.34038, MR. 2364901.

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Grosu, *Semilinear Evolution Equation Involving Measures,* Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică (Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIII (LVIII), Fasc. 5(2007), p.131-143.

G. Grosu, *Some Compactness Result for the L^∞-Solution Operator of a Linear Evolution Equation Involving Measures; the Case when $(\lambda I - A)^{-1}$ is Compact*, Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică

(Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIV(LVIII), Fasc. 4(2008), p. 7-23.
Zbl 1240.34276.

G. Grosu, *A Compactness Result in C([a,b];X) for the L^∞-Solution Operator of a Linear Evolution Equation Involving Measures*, Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică (Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIV(LVIII), Fasc. 3(2008), p. 5-18.
Zbl 1240.34275

G. Grosu, *Compactness Methods for an Integro-Differential Equation with Measures*, Annals of the Academy of Romanian Scientists, Series on Mathematics and its Applications, Volume 1, Number 2 (2009), p. 161-190. Abstracted/Indexed in: Mathematical Reviews, MathSciNet, Zentralblatt Math. ISSN: 2066-5997 (print version)).
Zbl 1251.45005.

G. Grosu, *Existence Results for a Semilinear Evolution System Involving Measures*, Romai Journal, vol. 8, no. 2 (2012), 79-102. Abstracted/Indexed in: Mathematical Reviews, Zentralblatt MATH, DOAJ, Directory of Open Access Journals, Google Scholar, Open-J Gate, A service by Informatics dedicated to the promotion of the Open Access movement for scholarly journals, Ulrich's Periodical Directory
Zbl 06289617

G. Lucrări ştiinţifice publicate în reviste din străinătate

G. Grosu, *Compactness Results for L^∞-Solution Operator of a Linear Evolution Equation Involving Measures*, Nonlinear differ. equ. appl. (NoDea) (ISI) Abstracted/Indexed in: Journal Citation Reports-Science, Mathematical Reviews, MathSciNet, Science Citation Index Expanded, SCOPUS, Zentralblatt Math, ISSN: 1021-9722 (print version), ISSN: 1420-9004 (online version)), 14 (2007), p. 411-428.
Zbl 1163.34038, MR. 2364901.

G. Grosu, *Existence results for semilinear evolution equations involving measures*, Nonlinear Funct. Anal. & Appl. , Kyungnam University Press, Massa, Korea, (Abstracted/Indexed in: Mathematical Reviews, MathSciNet, Zentralblatt Math, ISSN: 1229-1595 (print version)), 9 (2004), 337-358.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

G. Grosu, *Semilinear Evolution Equation Involving Measures,* Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică (Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIII (LVIII), Fasc. 5(2007), p.131-143.

G. Grosu, *Some Compactness Result for the L^∞-Solution Operator of a Linear Evolution Equation Involving Measures; the Case when $(\lambda I - A)^{-1}$ is Compact*, Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică (Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIV(LVIII), Fasc. 4(2008), p. 7-23.
Zbl 1240.34276.

G. Grosu, *A Compactness Result in C([a,b];X) for the L^∞-Solution Operator of a Linear Evolution Equation Involving Measures*, Buletinul Institutului Politehnic din Iaşi, Secţia Matematică, Matematică, Mecanică Teoretică, Fizică (Abstracted/Indexed in: Zentralblatt Math, ISSN: 1244-7863 (print), cod CNCSIS 19, categoria B), Tomul LIV(LVIII), Fasc. 3(2008), p. 5-18.
Zbl 1240.34275

G. Grosu, *Compactness Methods for an Integro-Differential Equation with Measures*, Annals of the Academy of Romanian Scientists, Series on Mathematics and its Applications, Volume 1, Number 2 (2009), p. 161-190. Abstracted/Indexed in: Mathematical Reviews, MathSciNet, Zentralblatt Math. ISSN: 2066-5997 (print version)).
Zbl 1251.45005.

G. Grosu, *Existence Results for a Semilinear Evolution System Involving Measures*, Romai Journal, vol. 8, no. 2 (2012), 79-102. Abstracted/Indexed in: Mathematical Reviews, Zentralblatt MATH, DOAJ, Directory of Open Access Journals, Google Scholar, Open-J Gate, A service by Informatics dedicated to the promotion of the Open Access movement for scholarly journals, Ulrich's Periodical Directory
Zbl 06289617

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science-

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale-

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

31 octombrie-3 Noiembrie 2019 : participare la „International Conference on Applied and Pure Mathematics (ICAPM)", Iaşi, România. Comunicarea "Compactness Results for The Solution Operator of a Linear Evolution Equation With Measures".
http://math.etc.tuiasi.ro/apm2019/

2-5 Noiembrie 2017 : participare la „International Conference on Applied and Pure Mathematics (ICAPM)", Iaşi, România. Comunicarea "Integro-differential Evolution Equation With Measures".
http://math.etc.tuiasi.ro/apm2017/

1-3 Noiembrie 2013 : participare la „International Conference on Applied and Pure Mathematics (ICAPM)", Iaşi, România. Comunicarea "Some Compactness Results for The Solution of a Linear Evolution Equation With Measures Operator".
http://math.etc.tuiasi.ro/apm2013/

22-25 August 2012 : participare la „The 20th Conference on Applied and Industrial Mathematics (CAIM)", Chişinău, Republica Moldova. Comunicarea "Existence Results for a Semilinear Evolution System Involving Measures".
http://caim2012.ust.md/index.html.

12-14 Noiembrie 2010 : participare la „International Conference on Applied and Pure Mathematics (ICAPM)", Iaşi, România. Comunicarea "A semiliniar evolution system involving measures".
http://math.etc.tuiasi.ro/apm2010/

20-24 july 2009: participare la „International Conference Equadiff12", Brno, Czech Republic. Comunicarea "Existence Results foe A Class of Reaction-Diffusion System Involving Measures"
http://www.math.muni.cz/~equadiff/

4-9 Septembrie 2006 : participare la "International Conference on Applied Analysis and Differential Equations", Iaşi, România, poster **G. Grosu**, "*Compactness for linear evolution equations with measures*" http://www.math.uaic.ro/~icaade

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

16-17 Noiembrie 2007 : participare la "Conferinţa Naţională de Matematică şi Informatică", Bacău, România, comunicarea **G. Grosu**, "*Some Compactness Results for the Solution Operator of a Linear Evolution Equation Involving Measures*"
http://www.ub.ro/ub/?ID=278

9-10 Noiembrie 2007 : participare la "Conferința Națională de Matematici Fundamentale și Aplicate", Iași, România, comunicarea **G. Grosu**, "*Semilinear Evolution Equation Involving Measures*", http://math.etc.tuiasi.ro/conferinte.html

23-24 Septembrie 2005 : participare la "National Conference of Mathematical Analysis and Application", Craiova, România, comunicarea **G. Grosu**, "*Compacteness of the solution operator for linear evolution equations involving measures*" http://inf.ucv.ro/events/CAMA2005/

J. Invenții.-

K. Contracte de cercetare/granturi

POSDRU/56/1.2/S/32768: „Formarea cadrelor didactice universitare si a studenților în domeniul utilizării unor instrumente moderne de predare-învătare-evaluare pentru disciplinele matematice, în vederea creării de competențe performante și practice pentru piața muncii", Proiect cofinanțat din Fondul Social European prin Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007 -- 2013, expert de tip B

"Probleme de viabilitate si invarianță pentru ecuații diferențiale și ecuații funcționale. Sisteme de reacție-difuzie si ecuații cu date măsuri", grant multianual, cod CNCSIS 1159, tip A, derulat 2006-2008, director prof. dr Ioan I. Vrabie, 7 membri

"Aproximarea și Evaluarea Soluțiilor unor Clase de Ecuații Funcționale", grant multianual, cod CNCSIS 128, tip A, derulat 2006-2007, director prof. dr. Adrian Corduneanu în 2006 și conf. dr. Ariadna Lucia Pletea în 2007, 11 membri

"Studiul Existenței, Unicității, Stabilității și Aproximării soluțiilor unor clase de ecuații funcționale", grant multianual, cod CNCSIS 818, tip A, derulat 2003-2005, director prof. dr. Adrian Corduneanu, 17 membri

"Studiul unor ecuații de evoluție cu date măsuri si probleme de viabilitate", grant multianual, cod CNCSIS 1345, tip A, derulat 2003-2005, director prof.dr. Ioan I. Vrabie, 6membri

L. Premii, distincții

„Premiu de excelență Universitatea din Bacău 2013"

M. Alte realizări semnificative

Membru in comitetul de organizare al Conferinței de Matematici Fundamentale și Aplicate, Catedra de Matematică UTI, 2007, 2009, 2011, 2013, 2015, 2017, 2019 Iași

Membru în comitetul de organizare al South Eastern European Mathematical Olympiad for University Students, 2014, 2018, 2024

Pregătirea studenților pentru concursuri naționale și internationale de matematică 2016- 2019

N. Membru în organizații profesionale:

Membru al Seminarului Matematic „A. Myller", Iași.

Membru al Societatii de Științe Matematice din Romania

Membru al Societății Române de Matematică Aplicată și Industrială „ROMAI".

Membru al Centrului de Pregatire Performată în Matematică care funcționează la Universitatea Tehnică Gheorghe Asachi din Iași, din 2016 pana in prezent

Membru al Cercului Științific de Referate "Ecuații diferențiale și optimizare", 2004- 2015, conducători prof. dr. O. Cârjă, prof. dr. I. I. Vrabie, prof. dr. C. Zălinescu, Univ. Al. I. Cuza, Iași.

O. Organizator de manifestări științifice:-

P. Activități în cadrul comunității academice:-

Data: 29 septembrie 2025

Lect. dr. mat. Gabriela Grosu

Semnătura [redacted]

Lista de lucrări

Numele şi prenumele: Cretu Georgeta

A. Teza de doctorat.

Teza de doctorat – Projective deformations for Finsler spacer (Deformări proiective de spaţii Finsler) – data susţinerii 13.12.2019, Universitatea Alexandru Ioan Cuza din Iaşi, domeniul Matematică, conducătorul de doctorat Prof. Dr. Ioan Bucătaru.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

G. Cretu, D. Fetcu, and G. Teodoru, An Introduction to Linear Algebra, Analytic Geometry, and Differential Geometry. Syntheses and Problems (in Romanian), PIM Publishing House, Iasi, Romania, 2024, 394 pp. ISBN 978-606-13-8285-9

E. Lucrări prezentate la seminarii/ conferinţe

E1_**Creţu G.**: International Symposium & International Student Workshop on Interdisciplinary Mathematics in the CiTi areas ISIM & ISWIM , Bucharest, Romania, 27-30-June 2023, with the prezentation: First Integrals for Finsler spaces".

E2_**Creţu G.**: Colloquium on Finsler Geometry and its Application June 12-16, 2023, Debrecen, Hungary, with the presentation: "New Finslerian Version of Beltrami's Theorem

E3_**Creţu G.:** Sesiunea de comunicări ştiinţifice a Facultăţii de Matematică, Zilele Universităţii "Alexandru Ioan Cuza" din Iaşi, 25 Octombrie 2019, cu prezentarea: "O Versiune nouă a Lemei lui Schur şi aplicaţiile acesteia".

E4_**Creţu G.:** Sesiunea Naţională de Comunicări Ştiinţifice de Matematică, Ediţia a IV-a, Iaşi, 5-7 Iulie 2019, cu prezentarea: "Noi metrici Finsler de curbură constantă".

E5_**Creţu G.:** Sesiunea Naţională de Comunicări Ştiinţifice de Matematică, Ediţia a V-a, Iaşi, 5-8 Iulie 2018, cu prezentarea: "Versiunea Finsleriană a Teoremei lui Beltrami".

E6_**Creţu G.**: , Geometry Days, Iaşi, 23-24 August 2018 with the prezentation: "Finsler Spaces of constant flag curvature".

E7_**Creţu G.**: International Symposium on Differential Models in Geometry, Computer Science and Hydrotechnics, Iasi, 22-25 mai , 2019, with the presentation "New classes of projectively related Finsler metrics of constant flag curvature

E8_**Creţu G.:** International conference on pure and applied mathematics, 6-th edition, Iaşi, 1-3 November, 2019, with the prezentation: "A new Finslerian Version of Schur's Lemma and its applications".

E9_**Creţu G.**: Conferinţa Naţională a doctoranzilor de Matematică, ediţia I, Timişoara 2-4 iulie 2018, cu prezentarea: "Versiunea Finsleriană a Teoremei lui Beltrami".

E10_**Creţu G.:** Sesiunea Națională de Comunicări Științifice de Matematică, Ediția a IV-a, 6-9 Iulie 2017, Iași, cu prezentarea: "Teorema lui Beltrami".
E11_**Creţu G.:** Sesiunea de comunicări științifice a Facultății de Matematică, Zilele Universității "Alexandru Ioan Cuza" din Iași, 28 Octombrie 2017, cu prezentarea: "Noi tensori de tip Weyl".

E12_**Creţu G.:** Sesiunea de comunicări științifice a Facultății de Matematică, Zilele Universității "Alexandru Ioan Cuza" din Iași, 27 Octombrie 2017, cu prezentarea: "Metrizabilitate Finsler şi Integrabilitate Frobenius".

E13_**Creţu G.**: International conference on pure and applied mathematics, 5-th edition, Iaşi, 2-4 November, 2017, with the prezentation: "A characterization for Finsler Spaces of constant flag curvature".

F: Lucrări ştiinţifice publicate în reviste WoS sau indexate în baze de date internaţionale

1. Ioan Bucataru, Oana Constantinescu, **Georgeta Cretu**: First integrals for Finsler metrics with vanishing χ-curvature, Annals of Global Analysis and Geometry, vol 62, nr. 2, 815-827, 2022, Factor Impact 0.76.

2. Ioan Bucataru, Oana Constantinescu, **Georgeta Cretu**: A class of Finsler metrics admitting first integrals, Journal of Geometry and Physics, August 2021, 104254 DOI:https://doi.org/10.1016/j.geomphys.2021.104254

3. **Creţu G**. New classes of projectively related Finsler metrics of constant flag curvature, International Journal of Geometric Methods in Modern Physics, March 2020, https://doi.org/10.1142/S0219887820500681.). **Factor impact- 1.24**

4. Bucataru I., **Creţu G**.: A characterisation for Finsler metrics of constant curvature and a Finslerian version of Beltrami theorem, The Journal of Geometric Analysis, Volume 30, Issue 1, pp 617-631, January 2020. **Factor impact: 0.924**

5. Bucataru I., **Creţu G**: A general version of Beltrami's theorem in Finslerian setting - Publicationes Mathematicae Debrecen , 2020. . Factor impact: 0.672

6. Bucataru I., **Creţu G** : Frobenius integrability and Finsler metrizability for 2-dimensional sprays, Differential Geometry and its Applications, Volume 56, Pages 308-324, February 2018 . Factor impact: 0.582

H:Contracte de cercetare.

Membru - Resilient Rapid ReconfiGurable pROdUction Process chains (R3GROUP), Horizon-243183-101091869 2023 – 2026.

Membră a proiectului PHC BRANCUSI 2019 Code Projet : 43460TL

Titlul proiectului în limba română și franceză:

Subvarietăți biarmonice și de curbură medie constantă / Sous-varietes biharmoniques et a courbure moyenne constante

Acronimul proiectului: BiCMC

Domeniul științific: Matematică

Director proiect: Loubeau Eric, Oniciuc Cezar

I: Premii, distincţii.

3 articole premiate de CNCS-UEFISCDI prin programul „Premierea rezultatelor cercetarii" din cadrul PN II si PN III, intre 2019-2021

Concurs pentru ocuparea postului poz. 20 , de lector universitar.,
Departamentul pentru Pregătirea Personalului Didactic
Disciplinele: limba engleză ,
limba franceză ,
Domeniul filologie,
Post publicat în Monitorul Oficial al României nr.147, partea a III-a, din 30.04.2024

LISTA DE LUCRĂRI

Candidat: BACIU G. Ioana - **Dr.**/ din 2020, lector universitar din 2024

1° Teza(-ele) de doctorat (T1, T2)
T1 Baciu, Ioana, *Nature and Culture in the American Gothic*, 2020, Universitatea „Alexandru Ioan Cuza" din Iași, domeniul filologie, coordonator prof. univ. dr. Codrin Liviu Cuțitaru

2° Cărţi/ cursuri/ manuale publicate în edituri recunoscute din ţară sau din străinătate (Ca1, Ca2 etc.), îndrumare publicate/culegeri de probleme (I1, I2 etc.), sisteme de laborator funcţionale etc. (D1, D2 etc.) cursuri proprii pe Web, sisteme e-learning etc. (W1, W2 etc.), după caz, precum şi alte lucrări (M1, M2 etc.) prin care se aduc *contribuţii la dezvoltarea activităţilor didactice/ profesionale.*

Ca	**Carte/ curs/ manual publicată în străinătate**	**Punctaj**
		-
	Capitol carte/ curs/ manual publicat în străinătate	-
	Carte/ curs/ manual publicată în editură recunoscută CNCS (unic/ prim autor sau co-autor)	-
	Capitol curs/ manual publicat în editură recunoscută CNCS	-
I	**Îndrumar/ culegere de probleme (publicat sau disponibil pe Web)**	-
D	**Sisteme de laborator funcţionale**	-
W	**Utilizarea sistemelor de predare/ învăţare/ evaluare de tip e-learning/ on-line/ multimedia etc.**	-
M		-

3° Cărţi/ capitole cărţi de specialitate publicate în edituri recunoscute din ţară sau din străinătate (Cb1, Cb2 etc.), articole/ studii publicate în reviste din ţară/ străinătate, cu factor de impact/ indexate în BDI/ neindexate în BDI (R1, R2 etc.), brevete de invenţie (B1, B2 etc.), creaţii artistice prezentate la manifestări recunoscute din ţară/ străinătate (A1, A2 etc.), articole/ studii publicate în volumele manifestărilor ştiinţifice naţionale/ internaţionale indexate BDI/ neindexate BDI (V1, V2 etc.), după caz, precum şi alte lucrări (N1, N2 etc.) prin care se aduc *contribuţii ştiinţifice la dezvoltarea domeniului.*

Cb	**Carte de specialitate publicată în editură din străinătate**	**Punctaj**
		-
	Capitol carte de specialitate publicată în editură din străinătate	
	Cb 1 Baciu, loana, 'Feminism and Consumer Culture in Contemporary Film Adaptations of Fairy- Tales: Snow-White and the Huntsman and Mirror, Mirror(2012)'in Shifting Perspectives: Personal and Political Transformations, eds. Maureen Dalyn —Goggin, Barbara Raztenbock, Oana Ursulesku, Hamed Tayebi, Karl Franzens Universitat Graz, pp. 35-41, ISBN 978-3-7011- 035-1, https://unipub.uni-graz.at/obvugruniver/content/titleinfo/4589865	10
	Cb 2 Baciu, loana, *Femininity as Performance in Carson McCullers' 'The Ballad of the Sad Cafe', 'The Member of the Wedding' and 'The Heart is a Lonely Hunter'*, Volumul Performing Identity: The Relationship between Identity, Gender and Performance in Literature, Theatre and the Visual Arta, ed. Panoyiota Crysochou, Cambridge Scholar Publishing, 2017, pp.39-52	10
	Carte de specialitate/ capitol publicat în editură din ţară, recunoscută CNCS	
	Cb 3 Baciu, loana, *Nature and Culture in the American Gothic,* Editura Prouniversitaria, București, 2023, 222 p.	20

R	**Articol publicat în revistă cotată ISI, cu factor de impact**	-
	Articol publicat în revistă indexata in baze de date internaţionale (BDI)	
	R.1. Baciu, Ioana, Recenzie a volumului „*Crime Fiction as World Literature", Louise Nilsson, David Damrosch, and Theo D'haen*, Bloomsbury Academic, 2017, în VTU Review: Studies in the Humanities and Social Sciences, vol.6, no.1, 2022, pp.75-76, doi: 10.54664/ZAEI2131	3
	R.2. Baciu, loana, „Gheorghe Asachi" Technical University of lasi, Recenzie*: Maggie O'FarreII, Hamnet*, Tinder Press, 2020, Les Cahiers Linguatek, ISSN 2559-7752, ISSN-L 2559-7752, Mémoire et Oubli, nr. 9-10/2021, pp. 197-200, indexare Fabula.org. CEEOL; http:/limbistraine.tuiasi.ro/images/8.%20CentruI%20de%20Iimbi%20modeme/LesCahiersLinguatek9- 10.pdf	3
	R.3. Baciu, loana, *Medical Gothic Masculinities in Bram Stoker's "Dracula*", Linguaculture, 12:1, 2021, pp. 77-86, DOI: 10.4773/Iincu-2021-1-0188	3
	R.4. Baciu, loana, „Gheorghe Asachi Technical University of lasi, Buletinul Institutului Politehnic lasi, Secția Socio-Umane, Volumul 67 (71), nr. 1-2/2021, *Writing is Masculine, Gossip is Feminine: American Myths in Shirley Jackson's "The Possibility of Evil*", pp. 39-52	3
	R.5. Baciu, Ioana, *Rewinding a Clockwork Self-Disintegration and Unity in The British Literature of the 60s: The Golden Notebook and A Clockwork Orange*, Romanian Journal of Literary Studies, nr. 5/2014, ISSN 2248-3004, pp. 619-626	3
	Articol/studiu publicat în revistă de specialitate neindexată în baze de date	
	R. 6. Baciu loana, *Thoreau's Civil Disobedience and Racism in The Help*, Revista ETHOS, nr. 12, 2015, Editura Institutului European, pp. 71-75	1
	R. 7. Baciu loana, Recenzie a volumului Constanța Vintilă-Ghițulescu, *Patimă și desfătare. Despre lucrurile mărunte ale vieții cotidiene în societatea românească*, 1750-1860 (Passion and Delight. On Small Things of Daily Life in Romanian society, 1750-1860), Humanitas, București, 2015; The Patching Zone (Editor Anne Nigten), Real Projects for Real People, voi.4, Rotterdam, Tripiti, 2015, HSS V.1 (2016), DOI: 10.1515/hssr -2016-0009	1
	R 8 Baciu loana, *Consumerism and Culture in Modemist Literature*, Revista ETHOS, nr. 13, 2015, ISSN 224 9427 Editura Universității Petre Andrei" din Iași	1
B	**Brevet de invenţie acordat în străinătate**	-
	Brevet de invenţie acordat în ţară	-
A	**Creaţie artistică prezentată la manifestare recunoscută din străinătate**	-
	Creaţie artistică prezentată la manifestare recunoscută din ţară	-
V	**Articol/studiu publicat în volumul unei manifestări ştiinţifice indexate in baze de date internaţionale (BDI)**	
	V1 Baciu, loana, *Reinterpreting the Frankenstein Myth in Yorgos Lanthimos'Poor Things (2023)*, Les Cahiers Linguatek 15-16 / 2024, pp 251-260, volumul conferinței *Mad Science: Innovation, Genius, Madness,* 10-11 mai 2024, Universitatea Tehnică „Gheorghe Asachi din Iași, Iași, http://limbistraine.tuiasi.ro/images/8.%20Centrul%20de%20limbi%20moderne/001_Les%20Cahiers%20Linguatek_vol.VIII_nos.15-16.pdf	4
	V2 Baciu, loana, *How WeII Does Political Corectness SeII? Portraying Racism for the Masses in The Help (2011) and Django Unchained (2012),* publicat în volumul conferinței Communication, Context, Interdisciplinarity, 3rd Edition, Tîrgu Mureș, 23-24 octombrie 2014, Institutul de Studii Multiculturale Alpha în parteneriat cu Universitatea "Petru Maior" din Tîrgu Mureș și Institutul de studii socio-umane "Gheorghe Șincai" al Academiei Române, ISSN 2069— 3389, pp. 211-218	4
	V3 Baciu loana, *Ted Hughes and R. S. Thomas —Advocates of Ecotheology?,* Literature, Discourse and Multicultural Dialogue 2nd Edition, Tirgu Mures. 4-5 decembrie 2014, Institutul de Studii Multiculturale Alpha în parteneriat cu Universitatea "Petru Maior"din Tîrgu Mures și Institutul de studii socio-umane "Gheorghe Șincai"al Academiei Române, pp. 991-998	4
	Articol/studiu publicat în volumul unei manifestări ştiinţifice neindexate în baze de date	
	V4Baciu, Ioana, *Changing Nature into Culture: Carson McCullers' Unredeemable Wunderkinds*, in volumul Change and Exchange, Proceedings of the Fifth National Conference for Students of English Studies at the University of Suceava, 9–10 May 2014, edited by Cornelia Macsiniuc and Daniela Maria Marțole, Editura Universității „Ștefan cel Mare" din Suceava, 2015, pp. 11-20	1
N	.....	-

4. Proiecte de cercetare-dezvoltare (P1, P2 etc.) pe bază de contract/ grant, precum şi alte lucrări de cercetare-dezvoltare (F1, F2 etc.), după caz, prin care se *aduc contribuţii la dezvoltarea mediului educaţional/ cultural/ economic/ social etc.*

	Proiecte/ Contracte/ Granturi de cercetare-dezvoltare câştigate prin competiţie internaţională	Punctaj
P		-
	Proiecte/ Contracte/ Granturi de cercetare-dezvoltare câştigate prin competiţie naţională sau încheiate cu institute de cercetare, companii, regii, societăţi comerciale	-
F	**Alte lucrări de proiectare-cercetare-dezvoltare**	
	F1 P/F1 Co-responsabil proiect CRU Transversal(ity) in the Univers(ity) (Transversal(ité) dans l'Univers(ité) Développement et renforcement des compétences transversales chez les étudiants et les enseignants des filières techniques et d'architecture : communication, transdisciplinarité, autonomie)	10
	F2 Expert formator în proiectul ROSE, acord de grant 348/SGU/SS/III cu titlul STIM@DIMA, Susţinerea viitorilor ingineri-manageri, 19.02.2024-31.05.2024	10
	F3/2024 – 15/11/2024, proiect câştigat în urma apelului de manifestare de interes pentru marcarea aniversării a 30 de ani AUF ECO 'Créer, transformer, innover, exceller ! 30 ans de l'AUF-ECO' https://www.auf.org/nouvelles/actualites/resultats-appel-manifestation-dinteret-creer-transformer-innover-exceller-30-ans-de-lauf-eco/	10
		101 p

Note:

(1) Fiecare lucrare este prezentată, în limba în care a fost publicată / expusă, corespunzător structurii "I, II, III, IV, V, VI", unde:

I - indicativul (T1, T2 etc.; Ca1, Ca2 etc.; ...), care se scrie "bold" la lucrările realizate după acordarea ultimului titlu didactic/ grad profesional (**Ca1**, **I1** etc., după caz);
II - autorii în ordinea din publicaţie, cu scriere "bold" **a candidatului**;
III - *titlul*, scris "italic";
IV - editura sau revista sau manifestarea şi/sau alte elemente de localizare, după caz;
V - intervalul de pagini din publicaţie, respectiv, pp ...-..., numărul total de pagini, respectiv, ... pg., sau alte date similare, după caz;
VI - anul sau perioada de realizare, după caz;

(2) În cadrul fiecărui grup de lucrări (Ca1, Ca2 etc.; I1, I2 etc. ; ...), lucrările sunt în ordine invers cronologică;
(3) În cazul în care o grupă de lucrări nu se regăseşte în activitatea candidatului, respectiva grupă poate fi eliminată din listă;
(4) Candidaţii au libertatea să completeze lista şi cu alte grupe de lucrări.

Data:

25.06.2025

Candidat,

Lector univ. dr. Ioana Baciu

Lista de lucrări în domeniul de studii universitare de licență/masterat "Inginerie electronică, telecomunicații și tehnologii informaționale"

Numele şi prenumele: Ursanu Adela-Ioana

A. Teza de doctorat: „Cercetări asupra utilizării unor materiale metalice speciale în dispozitive medicale de recuperare post-traumatică", Universitatea Tehnică „Gh. Asachi" din Iaşi, 2016.

F. Lucrări științifice publicate în reviste cotate ISI sau indexate în baze de date internaționale

1. *„The Motivation of Students' Participation in School Sports Activities"* - Liliana-Elisabeta Radu, Gabriela Curcan and Adela-Ioana Ursanu, Buletinul Institutului Politehnic din Iași-Sectia socio-umane, volumul 70 (74), Numărul 1-2, 2024;

2. *„Aspects Regarding the Consumption of Dietary Supplements among the Active Population in Romania"* - Pia-Simona Fagaras, Silvia-Violeta Teodorescu, Anca Bacarea, Renato-Gabriel Petrea, **Adela-Ioana Ursanu**, Geanina Cozmei, Liliana-Elisabeta Radu and Gynetta-Ionela Vanvu - Int. J. Environ. Res. Public Health 2023, Volume 20, Issue 1, 850, Basel, January 2023 (FI:4.614).

3. *„Importanța kinetoterapiei în prevenirea obezității din timpul sarcinii"* Adela Ursanu, Pia Simona Făgăraș, Liliana Elisabeta Radu si Renato Gabriel Petrea, Buletinul Institutului Politehnic din Iași-Sectia socio-umane, volumul 67 (71), Numărul 3-4, 2021;

4. *„Testarea mobilității la copiii care practică înotul și atletismul în Iași"*, Renato Gabriel Petrea, Adela Ioana Ursanu, Liliana Elisabeta Radu şi Pia Simona Făgăraș, Buletinul Institutului Politehnic din Iași-Sectia socio-umane, volumul 67 (71), Numărul 3-4, 2021;

5. *"Dynamic mechanical analyze of superelastic CuMnAl shape memory alloy"* – **A.I. (Dragoș) Ursanu,** S Stanciu, B Pricop, F Săndulache, N Cimpoeșu - THE 7th INTERNATIONAL CONFERENCE ON ADVANCED CONCEPTS IN MECHANICAL ENGINEERING - DIMITRIE MANGERON JUBILEE – ACME 2016 JUNE 9 – 10, IAŞI, ROMANIA, prezentare poster; IOP Conf. Series: Materials Science and Engineering 147 (2016) 012032 doi:10.1088/1757-899X/147/1/012032, 2016;

6. *"Metallic materials for mechanical damping capacity applications"*, R C Crăciun, S Stanciu1, R Cimpoeșu1, **A I (Dragoș) Ursanu**, V Manole, P Paraschiv and D L Chicet, IOP Conf. Series: Materials Science and Engineering 147 012031 doi:10.1088/1757-899X/147/1/012031, 2016;

7. *"Smart Alloys for Automotive Bumpers"* - Radu Cristian Crăciun, Sergiu Stanciu, Ramona Cimpoeșu, Florin Săndulache, **Adela-Ioana Ursanu Dragos**, Mihai Axinte; Applied Mechanics and Materials (Volumes 809-810), Chapter 5: Advanced Materials, DOI 10.4028/www.scientific.net/AMM.809-810.578, 2015;

8. *"Intelligent Materials for Recuperative Sports Injuries"* - **Ursanu Dragos A.**; Stanciu, S.; Cimpoesu, N.; Manole, V; Ursanu, G. 4TH INTERNATIONAL CONGRESS OF PHYSICAL EDUCATION, SPORT AND KINETOTHERAPY (ICPESK 2014), pg: 567-572, publicata în 2015;

9. *"Implementation of Shape Memory Alloys as Active Elements in Injuries Recuperative Equipment"*- **Adela Ursanu Dragoş,** Sergiu Stanciu, Nicanor Cimpoeşu, Mihai Dumitru, Ciprian Paraschiv, Applied Mechanics and Materials, Vol. 657, pg. 392-396, 10.4028/www.scientific.net/AMM.657.392, November 2014;

10. "NiTi Shape Memory AlloyActive Element Behaviour in Long Time Solicitations Conditions"- **Adela Ursanu Dragoş**, Sergiu Stanciu, Ramona Cimpoeşu, Cristian George Adoroaie, Petronela Paraschiv, Mihai Bernevig, Applied Mechanics and Materials, Vol. 657, pg 387-391, Chapter 4: Advanced Materials, DOI 10.4028/www.scientific.net/AMM.657.387, November 2014;

11. *"Micro-macro surface aspects of corrosion resistance of a stainless steel in sea water"*, **Adela Dragoş Ursanu**, Sergiu Stanciu, Mihai Bernevig, Dan Gelu Găluşcă, Carmen Nejneru, Cristian Adoroaie, Ramona Cimpoeşu -publicat în nr.21 al revistei TEHNOMUS indexată BDI, februarie-martie 2014;

12. *"Experimental results on synthetic cooling environment"*, Nejneru Carmen, Grecu Adrian, Vizureanu Petrică, Bernevig Mihai, **Ursanu Adela**, Ramona Cimpoeşu -publicat în nr. 21 al revistei TEHNOMUS indexată BDI, 2014;

13. *"Surface investigation of corroded NiTi shape memory alloy"*, **Adela Dragoş URSANU**, Sergiu STANCIU, Nicanor CIMPOESU, Ramona CIMPOEŞU, Mihaela RĂŢOI, Armand ENACHE, Academic Journal of Manufacturing Engineering, vol. 12, pg 96-91, ISSUE 2/2014;

14. *"Theoretical and Experimental Determination of the Muscle Strength for the Kinetotherapy Rehabilitation of the Elbow Joint after an Immobilization Period"*- Petronela Paraschiv, Nicanor Cimpoeşu, **Adela Ursanu Dragoş,** Ciprian Paraschiv, Cristina Stoica, ICSPEK 2013, publicată în Procedia - Social and Behavioral Sciences 00 000–000 Elsevier Journal, 2014;

15. *"The corrosion resistance of NiTi-active element before and after thermo-mechanical solicitation"* - **Adela Ursanu,** Sergiu Stanciu, Ramona Cimpoeşu, Iulian Ionita, Mihaela Raţoi, Titiana Constantin, Iulian Cimpoeşu, Maricel Agop, Applied Mechanics and Materials, Vol. 371, pg 353-357, 2013;

16. *"Preliminary Results of Copper Based Shape Memory Alloys Analysis used for MEMS Applications"* - Cimpoesu Nicanor, **Ursanu Adela**, Stanciu Sergiu, Cimpoesu Ramona, Constantin Boris, Paraschiv Ciprian, Gurlui Silviu Octavian, APPLIED MECHANICS AND MATERIALS Vol. 371 pp 368-372, TTP, doi: 10.4028/www.scientific.net/AMM.371.368, 2013.

17. *„Chemical and micro-structural characterization of a copper-based shape memory alloy"* - I. Cimpoesu, S. Stanciu, N. Cimpoesu, C. Munteanu, B. Istrate, **A. Ursanu Dragos**, D. Dană, A. Alexandru, C. Nejneru, Journal of Optoelectronics and Advanced Materials Vol. 15, No. 11 - 12, p. 1392 – 1398, November – December 2013, (FI: 0,4).

18. *„Designing a Rehabilitation Equipment with Intelligent Metallic Elements"*- **Adela-Ioana Ursanu**, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, Tomul LXII (LXVI) Fasc. 2/2017;

19. *„Research on the use of special shape memory alloys in kinesiotherapy"*- **Adela-Ioana Ursanu**, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, Tomul LXII (LXVI) Fasc. 1/2016;

20. *„Metallic implants corrosion resistance improvement using ceramic layers"*- **Adela-Ioana Ursanu**, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, tomul LVIII(LXII), fasc. 1-2/2013;

21. *„Concepts on how to build a robotic activ element with implementation of a shape memory alloy* - **Adela-Ioana Ursanu,** prof.dr.ing Sergiu Stanciu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, tomul LVIII(LXII), fasc. 1-2/2012.

H. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS

1. "Metodologia dezvoltării calităților motrice dominante (viteza și detenta) pentru probele de garduri" - Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2011;

2. "Studiu comparativ între tehnica clasică și cea modernă in proba de triplusalt - Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2010;

3. "Rolul exercițiilor fizice în prevenirea și tratarea diabetului - Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2009;

4. "Studiu comparativ privind alergarea între garduri în proba de 100mg – înaltă performanță)" - Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2009;

5."Studiu privind conținutul și particularitățile primului stadiu al antrenamentului în atletism (selecție și inițiere)"- Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2008;

6. "Pregatirea poliatletică a sportivilor începători și avansati" - Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2006;

7. "Particularitatile pregatirii unui concurs de obiectiv in proba de 100mg (perioada pregătitoare) – studiu de caz"- Adela-Ioana Ursanu, publicată în Buletinul Institutului Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2005;

8. "Aspecte metodologice noi în marketing-ul competițiilor sportive de înalt nivel - studiu de caz – Jocurile Olimpice"- Adela-Ioana Ursanu, publicată în Buletinul Institutului

Politehnic, secția Științe Socio-Umane, UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI, 2005;

9. "Particularitătile pregătirii unui concurs de obiectiv în probele de sprint-garduri (perioada competitională)"– Adela-Ioana Ursanu, lucrare publicată în "Studii şi cercetări în domeniul Educatiei Fizice, Sportului şi Kinetoterapiei", în urma sesiunii internationale cu acelaşi nume, iunie 2004 , editura UNIVERSITĂȚII TEHNICE „GHEORGHE ASACHI" DIN IAŞI, 2004.

I. **Lucrări ştiinţifice publicate în volumele conferinţelor**

1. *"Orthosis for fracture recovery with NiTi shape memory alloy wire active element"*, **A. (Dragoş) Ursanu**, S. Stanciu, N. Cimpoeşu, V. Manole, "Gheorghe Asachi" Technical University of Iasi, G. Ursanu, R. Cimpoeşu, A. Enache, University of Medicine and Pharmacy "Gr. T. Popa", Iaşi, participare la conferinta internaţională bramat 2015, Brasov, Romania;

2. *"Chemical and micro-structural characterization of a copper based shape memory alloy"*, Nicanor Cimpoesu, Sergiu Stanciu, Ramona Cimpoesu, Corneliu Munteanu, Bogdan Istrate, **Adela Ursanu Dragoş**, participare la conferința internaţională Bramat 2013, Brasov, Romania;

3. *"Analyze of radius stress and stains"*, Petronela Paraschiv, Nicanor Cimpoeşu, **Adela Ursanu Dragoş**, Ciprian Paraschiv, Cristina Stoica, participare la congresul internaţional UNEFS 2013, Bucuresti;

4. *"Heat treatment influence on microstructure and phases of copper based SMAs"*, Iulian Cimpoeşu, **Adela Ursanu**, Bogdan Istrate, Cornel Munteanu, Nicanor Cimpoeşu, Adrian Alexandru, Maricel Agop, participare la conferinta Internaţională Modtech 2013, Sinaia;

5. *"Antrenamentul pliometric pentru dezvoltarea forței explozive (detentei) în probele atletice de sărituri"*- Ursanu Grigore, **Ursanu Adela**, Ursanu Viorica, publicată în "Sportul - de la concepte fundamentale la dimensiuni novatoare în societatea cunoașterii", editura Spiru Haret, ISBN 978-973-579-249-7, prezentare orală la sesiunea științifică cu același nume, Iași, martie 2015.

L. Premii, distincții

1. Premiu de Excelență acordat de Federația Română de Atletism pentru rezultatele sportive obținute in anul 2022;
2. Premiu de Excelență acordat de Consiliul Județean Iași și Primăria Municipiului Iași pentru rezultatele sportive obținute in anul 2022;
3. Vicecampioană mondială la atletism, Finlanda, Tampere, iunie 2022
4. Premiu de Excelență acordat de Universitatea Tehnică Gh. Asachi din Iași și clubul Sportiv Politehnica Iași pentru rezultate sportive deosebite în anul 2024.

Data
29.08.2025

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Plopa Olga

A. Teza de doctorat.

"Cercetări privind măsurarea numerică a impedanţelor"

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

Camelia Petrescu, **Olga Plopa**: Circuite liniare și neliniare - Culegere de probleme, Editura Politehnium, 2021.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Trandabat, A.F.; Schreiner, O.D.; Schreiner, T.G.; **Plopa, O.**; Ciobanu, R.C., Study on Hybrid Assemblies of Graphene and Conducting Polymers with Embedded Gold Nanoparticles for Potential Electrode Purposes. *Chemosensors* **2025**, Volume: 13, Issue: 4, **Journal Impact Factor ™** (2024) **3.7,** (Five Year: **3.8**), eISSN: 2227-9040, https://doi.org/10.3390/chemosensors13040130, **WOS:001474356600001 (WoS, Scopus)**
2. Catalin-Paul Constantin, Luiza Madalina Gradinaru, **Olga Plopa**, Radu-Dan Rusu, Surface modification of polyimide films towards very low contact angles, Polymer Degradation and Stability, Volume 202, **2022**, Article Number: 110036, ISSN 0141-3910, Published: AUG 2022; Document Type: Article, https://doi.org/10.1016/j.polymdegradstab.2022.110036, ISSN: 0141-3910; eISSN: 1873-2321; **Journal Impact Factor ™** (2021) **5.204**, **WOS:000824494600003. (WoS, Scopus).**
3. Drobota, M, Butnaru, M., Vornicu, N., **Plopa, O.**, Aflori, M., *Facile Method for Obtaining Gold-Coated Polyester Surfaces with Antimicrobial Properties*, ADVANCES IN POLYMER TECHNOLOGY, Volume: **2020**, Article Number: 4504062, DOI: 10.1155/2020/4504062, Published: APR 2 2020, Document Type:Article, **Impact Factor 1.539** (2019), 1.589 (5 year), Publisher WILEY-HINDAWI, ADAM HOUSE, 3RD FL, 1 FITZROY SQ, LONDON, WIT 5HE, ENGLAND, ISSN: 0730-6679, eISSN: 1098-2329, **WOS:000526854400001.**

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

1. **Plopa Olga**, Paulet Marius, Ursan George-Andrei, Ungureanu Laurentiu, Schreiner Cristina, *Capacitive C and RC sensorial test systems for automatic lighting control*, Buletinul Institutului Politehnic Iasi, sectia Electrotehnica, Energetica, Electronica, VOL 65 (69), FASC 4, pp. 61-70, **2019.**

2. Arădoaei S., **Plopa Olga**, *Symmetrical components evaluation in real time*, Buletinul Institutului Politehnic din Iaşi, Volumul 63 (67), Fasc. 2, **2017**, pp. 27-27.

3. Ursan G. A., Vremeră E., Ursan Maria, **Plopa Olga**, "Advanced Automotive Communication NetworkS, CAN Protocol Technology", Buletinul Institutului Politehnic Iasi, Tomul LV (LIX), FASC 3, pp. 43-56, **2009**.

4. **Plopa Olga**, C. Fosalau, Cretu M., "Grützmacher bridge as operation principle for a digital impedance meter", Buletinul Institutului Politehnic Iasi, Tomul LIV (LVIII), FASC 4, pp. 1107-1112, **2008**.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. João Monge, Octavian Postolache, **Olga Plopa**, Alexandru Trandabat, Oliver Schreiner and Thomas Schreiner, Glucose Detection in Sweat using Biosensors, The 7th IEEE International Conference on E-Health and Bioengineering, EHB 2019. 21-23 November **2019**, Iasi, Romania, DOI: 10.1109/EHB47216.2019.8970023, Electronic ISBN: 978-1-7281-2603-6, USB ISBN: 978-1-7281-2602-9, Print on Demand(PoD) ISBN: 978-1-7281-2604-3, Electronic ISSN: 2575-5145, Print on Demand(PoD) ISSN: 2575-5137, (Indexat WoS, IEEE, Scopus) **WOS:000558648300153**

2. Gabriela Postolache, Alexandru Trandabat, **Olga Plopa**, Pedro Silva Girão and Octavian Postolache, Wearable devices for studying microvascular reactivity – it is feasible?, 7-th edition of the International Conference on e-Health and Bioengineering, EHB 2019. 21-23 November **2019**, Iasi, Romania, in curs de publicare (Indexat WoS, IEEE, Scopus) **WOS:000558648300137**

3. Ursan George-Andrei, **Plopa Olga**, Contofan Cosmin, Aradoaei Mihaela, Ursan Maria, *Optical Evalution Systems for Anisotropic Composite Materials Quality Assessment*, 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIELMEN 2019), 10-11 October **2019**, Chisinau, R. Moldova, (WoS, Scopus, IEEE), pp. 690-693, INSPEC Accession Number: 19186627, DOI: 10.1109/SIELMEN.2019.8905831, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0, **WOS:000630287500041**

4. Marius Paulet, **Olga Plopa**, George-Andrei Ursan, Ileana Ursu, *Vibration and Mechanical Shock Monitoring Using Flexible Piezoelectric Sensors*, 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIELMEN 2019), 10-11 October **2019**, Chisinau, R. Moldova, (WoS, Scopus, IEEE), pp. 636-639, INSPEC Accession Number: 19172214, DOI: 10.1109/SIELMEN.2019.8905827, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0, **WOS:000630287500037**

5. **Olga Plopa**, Marius Paulet, George-Andrei Ursan, Laurentiu Ungureanu, Cristina Schreiner, Capacitive C and RC Sensorial Test Systems in LabVIEW Graphic Programming Environment with NI USB-6210 Acquisition Board, 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIELMEN 2019), 10-11 October **2019**, Chisinau, R. Moldova, (Wos, Scopus, IEEE), pp. 632-635, INSPEC Accession Number: 19172180, DOI: 10.1109/SIELMEN.2019.8905884, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0 , **WOS:000630287500091**

6. **Olga Plopa**, Sebastian-Teodor Aradoaei, George-Andrei Ursan, *A New PSpice Implementation of a Three-Phase Induction Machine Model*, 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIELMEN 2019), 10-11 October **2019**, Chisinau, R. Moldova, (WoS, Scopus, IEEE), pp. 520-525, INSPEC Accession Number: 19172232, DOI: 10.1109/SIELMEN.2019.8905799, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0 **WOS:000630287500011**

7. George-Andrei Ursan, **Olga Plopa**, Maria Ursan, *Use of Electric circuits' Simulation Methods, as New Methods of Learning/Experimentation in an Electrical Laboratory*, 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIELMEN 2019), 10-11 October **2019**, Chisinau, R. Moldova, (WoS, Scopus, IEEE), pp. 532-535, INSPEC Accession Number**:** 19172233, DOI: 10.1109/SIELMEN.2019.8905857, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0, **WOS:000630287500066**

8. Romeo Cristian Ciobanu, Marius Andrei Olariu, George-Andrei Ursan, Mihaela Aradoaei and **Olga Plopa**, Modeling and Simulation of Nanoparticles Dispersion for the Realization of ACFs, International Symposium on Fundamentals of Electrical Engineering 2018, November 1 - 3, **2018** Bucharest, Romania (Indexat WoS, IEEE, Scopus), **WOS:000480396400034**, ISBN:978-1-5386-7212-9, IDS Number: BN3NN

9. I.D. Vlaicu, M. Maček Kržmanc, A.V. Maraloiu, D. Ghica, I.F. Mercioniu, M. Ştefan, A.M. Vlaicu, R.F. Negrea, A.C. Kuncser, Ş. Bulat, R. Ciobanu, **O. Plopa**, Limits and Particularities of the Synthesis of $Ba_{1-x}Ca_xTiO_3$ for Piezoelectric Applications, by Topochemical Conversion from Molten Salt Solutions, 2018 International Conference on Electrical and Power Engineering, EPE 2018, October 18-19 **2018**, Iaşi, Romania, **WOS:000458752200205**, ISBN 978-1-5386-5062-2, ISSN 2471-6855 (Indexat WoS, IEEE, Scopus)

10. Cristian Győző Haba, Liviu Breniuc, **Olga Plopa**, Ileana Ursu, Multiple Gas Sensing Platform with RFID Connectivity, 2018 International Conference on Electrical and Power Engineering, EPE 2018, October 18-19 **2018**, Iaşi, Romania, **WOS:000458752200120**, ISBN 978-1-5386-5062-2, ISSN 2471-6855 (Indexat WoS, IEEE, Scopus)

11. Liviu Breniuc, Cristian Győző Haba, **Olga Plopa**, Laurentiu-Iulian Ungureanu, Electrochemical RFID Sensor for Gas Concentration Measurement, 2018 International Conference on Electrical and Power Engineering, EPE 2018, October 18-19 **2018**, Iaşi, Romania, pp. 0290-0295, doi: 10.1109/ICEPE.2018.8559841, **WOS:000458752200054**; ISBN: 978-1-5386-5062-2; ISSN: 2471-6855; IDS Number: BM0GU (Indexat WoS, IEEE, Scopus)

12. Camelia Petrescu, **Olga Plopa**, Using Differential Evolution Algorithms for the Analysis of Nonlinear Circuits, 11-th International Conference on Electromechanical and Power Systems (SIELMEN 2017), pp. 196-200, USB PROCEEDINGS - ISBN 978-1-5386-1845-5, 11 October **2017** Iasi / 12-13 October 2017, Chisinau. **WOS**:**000426906000038**, ISBN: 978-1-5386-1846-2; IDS Number: BJ6PR. (Indexat WoS, IEEE, Scopus)

13. **Plopa Olga**, Ursan Maria, Tabrea Adrian, "*Panels and profiles for constructions based on bio-composites*", International Conference and Exposition on Electrical and Power Engineering EPE 2014, Iasi, 16-18 October **2014**, pp. 873 - 876, INSPEC Accession Number: 14791714, DOI: 10.1109/ICEPE.2014.6970036, **WOS:000353565300162**, ISBN: 978-1-4799-5849-8; ISSN: 2471-6855; IDS Number: BC5TE, (Indexat ISI Web of Knowledge, IEEE, Scopus)

14. **Plopa Olga**, "*Implementing digital potentiometer in impedance measurements*", MTC 2011, 7th International Conference Management of Technological Changes, 1-3 Septembrie 2011, Alexandroupolis, Grecia, pp. 405-407, **WOS:000306939900102**, ISBN: 978-960-99486-2-3, IDS Number: BBI18. (WoS, Scopus)

15. Kalvachev Y., Ganev V., Macheva Lubomira, **Plopa Olga**, Ciobanu Romeo, *"GRID-embeded Remote Instrumentation Applied in the Earth Sciences"*, International Multidisciplinary Scientific GeoConference SGEM **2009**, IDS Number: BOB04, ISSN 1314-2704, former ISBN 978-954-91818-1-4, pp. 79-86 **WOS:000276075800012** Indexat ISI Web of Knowledge)

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. Ursan George-Andrei; **Plopa Olga**; Ursan Maria, Chirica Alexandru, Use of Recycled Plastic for Educational Purposes, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, **2024**, pp. 312-315, doi: 10.1109/EPEi63510.2024.10758185 (Scopus, IEEE).

2. Trandabat Alexandru, Arcire Alexandru, Ciobanu Romeo Cristian, **Plopa Olga**, Aradoaei Mihaela, Olteanu Alin, Mosneagu Andrei Adriana Mona, Design and modeling considerations for developing a millimolar Oxalic Acid detection sensor based on screen-printed carbon electrode and methilbenzenpirol, Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, EPE **2022**, pp. 245 – 252, ISBN 978-166548994-2, DOI 10.1109/EPE56121.2022.9959778 (Scopus, IEEE)

3. Botoc Dorin; Salceanu Alexandru; **Plopa Olga**; Siroux Monica, Exergetic Approach for Magnetic Refrigeration, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), **2021**, pp. 315-318, doi: 10.1109/SIELMEN53755.2021.9600331. (Scopus, IEEE)

4. Ursan George-Andrei; **Plopa Olga**; Ursan Maria, PLCs' Inputs and Outputs Response Time Testing Application, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), **2021**, pp. 057-060, doi: 10.1109/SIELMEN53755.2021.9600400. (Scopus, IEEE)

5. Ursan Maria; Ursan George-Andrei; **Plopa Olga**, Practical Application for Monitoring the Behavior of a Series RLC Circuit, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), **2021**, pp. 065-068, doi: 10.1109/SIELMEN53755.2021.9600325. (Scopus, IEEE)

6. Ursan George-Andrei; **Plopa Olga**; Ursuleasa Raluca Mihaela; Ursan Maria; Tugui Costel, Obtaining of the Paints with Electromagnetic Shielding Properties, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), **2021**, pp. 367-370, doi: 10.1109/SIELMEN53755.2021.9600281. (Scopus, IEEE)

7. Ursan George-Andrei, **Plopa Olga** and Ursan Maria, Testing Stand Using Hardware Description Languages, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), **2021**, pp. 061-064, doi: 10.1109/SIELMEN53755.2021.9600334. (Scopus, IEEE)

8. Ursan George-Andrei, **Plopa Olga**, Olteanu Alin-Alexandru, Ursu Ileana and Ursan Maria, Dielectric Properties of Malleable Composite Materials in Electromagnetic Field, *2021 International Conference on Electromechanical and Energy Systems (SIELMEN)*, **2021**, pp. 1-4, doi: 10.1109/SIELMEN53755.2021.9600422. (Scopus, IEEE)

9. Contofan Iulian Cosmin, Ursan George-Andrei, **Plopa Olga**, Ursan Maria, Correlation Between Concentration and Particles Size in Order to Optimize the Thermal Heating Process by Exposure of Composite Materials to Microwave Radiation, 11th International Conference and Exposition on Electrical and Power Engineering (EPE 2020), October 22-23, **2020**, Iasi, Romania. (Scopus, IEEE)

10. Ursan George-Andrei, **Plopa Olga**, Ursan Maria, Simulation of Electrical Circuits Using Data Acquisition Boards for Online Education, 11th International Conference and Exposition on Electrical and Power Engineering (EPE 2020), October 22-23, **2020**, Iasi, Romania. (Scopus, IEEE)

11. Laurentiu Ungureanu, Ciobanu Romeo, Schreiner Cristina, Mihaela Aradoaei, **Plopa Olga**, Flexible Piezo-Electric Composites for 3D-Printed Harvesters, 11th International Conference and Exposition on Electrical and Power Engineering (EPE 2020), October 22-23, **2020**, Iasi, Romania. (Scopus, IEEE)

12. Calin Rugina, **Olga Plopa**, Alexandra Iulia Vizitiu, *Mobile Applications for Smart Notifications*, 22nd IMEKO TC4 International Symposium & 20th International Workshop on ADC Modelling and Testing, Iasi, Romania, ISBN 978-606-13-3975-4, September 14-15, **2017**. (Indexat Scopus)

13. Hana Uršič, Romeo Ciobanu, **Olga Plopa**, *Polyoxidic Thick Films for Piezoelectric Energy Harvesters*, 22nd IMEKO TC4 International Symposium & 20th International Workshop on ADC Modelling and Testing, Iasi, Romania, ISBN 978-606-13-3975-4, September 14-15, **2017**. (Indexat Scopus)

14. **Plopa Olga**, Creţu M., Burlacu Ramona, Costineanu D., *"A new approach of digital potentiometers: digital impedance measurements"*, 17th Symposium IMEKO TC 4, pp. 415-418, September 8-10, **2010**, Kosice, Slovakia (Scopus)

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

1. Schreiner C., Ciobanu R.C., Vlaicu I. and **Plopa Olga**, Innovative Nano-materials and Architectures for Integrated Piezoelectric Energy Harvesting Applications, 15th International Conference on Environmental Science and Technology, Rhodes, Greece, 31 August to 2 September **2017**, ISSN 1106-5516, ISBN 978-960-7475-53-4.

2. Cornelia Lorenz, **Olga Plopa**, Georgiana Maria Moraru, Cristian Bejenaru, "Dielectric specific characteristics of nanostructurated cores based on polysulfone in Salisbury and Jaumann configuration", 9th International Conference and Exhibition on Electromechanical and Power Systems SIELMEN 2013, pp. 84-87, 17-18 October **2013** Chişinău, Rep. of Moldova.

3. Cornelia Lorenz, **Olga Plopa**, Andrei Niagu, Daniela Astarastoaei, "Methods for testing the shielding efficiency of electromagnetic shielding systems with hexachirala structure", 9th International Conference and Exhibition on Electromechanical and Power Systems SIELMEN 2013, pp. 60-63, 17-18 October **2013** Chişinău, Rep. of Moldova.

4. Cornelia Lorenz, **Olga Plopa**, Bogdana Florean, Anca Pintea, "Development of electromagnetic shielding systems with chiral honeycomb layered multiwire structure", 9th

International Conference and Exhibition on Electromechanical and Power Systems SIELMEN 2013, pp. 48-51, 17-18 October **2013** Chişinău, Rep. of Moldova.

5. **Plopa Olga**, Burlacu Ramona, Schreiner Cristina, "Considerations on new biosensor technology", 8th International Conference on Electromechanical and Power Systems SIELMEN 2011, pp 402-407, 13-15 octombrie **2011**, Chisinău.

6. **Plopa Olga**, Ursan G.A. and Astărăstoae Daniela, "Implementation of virtual impedancemeter", EPE 2010, The 6th International Conference on Electrical and Power Engineering, pp. I-371- I-374, Iasi, România 28-30 October **2010**.

7. **Plopa Olga**, Spiridonică A. M., Pîslaru M., Rusei R., "A Making-decision System Based on Fuzzy Rules for Quality Assurance in Production Process", 7th International Conference on Electromechanical and Power Systems SIELMEN 2009, pp. I-36 - I-39, October 8-9, 2009, Iaşi, Romania.

8. **Plopa Olga**, Creţu M., "Possibilities of Digitizing of Grützmacher Bridge", 7th International Conference on Electromechanical and Power Systems SIELMEN 2009, pp. I-231 - I-234, October 8-9, 2009, Iaşi, Romania.

9. Ursan G. A., Vremeră E., Ursan Maria, **Plopa Olga**, "Hybrid Electrical Vehicle,Control System for Parallel Design", 3rd International Symposium on Electrical Engineering and Energy Converters, pg. 151, September 24-25, 2009, Suceava, ISSN 2066-835X.

10. Costineanu D., Fosalau C., Damian C., **Plopa Olga**, *"Triangulation-based 3d image processing method and system with compensating the errors of shadowing"*, 16th IMEKO-TC4Symposium, pp. 460-463, September 22-24, Florence, **2008**.

11. Zet C., **Plopa Olga**, Damian C., Fosalau C., *"Virtual Impedance spectroscopy for electrolytical cells"*, 16th IMEKO-TC4Symposium, pp. 651-656, September 22-24, Florence, **2008**.

12. **Plopa Olga**, C. Fosalau, "Considerations on Digital Impedance Measurements", Proceedings of 6th International Conference on Electromechanical and Power Systems, SIELMEN 2007, October 4-6, Chişinău, **2007**, Vol. II, pp. 32-37.

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

1. Seliman Cătălina, **Plopa Olga**, Damian C., Creţu M., "Urban Environment Influence on the Surface Water Quality in the City of Iaşi", Ecological agriculture - priorities and perspectives, the 52nd Scientific Conference, Book of abstracts pg. 38, October, **2009**.

2. **Plopa Olga**, Seliman Cătălina, Damian C., "Environmental Parameters Laboratory Measurements With Virtual Instrumentation", Ecological agriculture - priorities and perspectives, the 52nd Scientific Conference, Book of abstracts pg. 62, October, **2009**.

J. Invenţii.

K. Contracte de cercetare/granturi

1. POC 2014-2020, Axa 1, Acţiunea 1.2.3 Parteneriate pentru transfer de cunoştinţe, „Parteneriate pentru transfer de cunoştinţe în domeniul materialelor polimere folosite în ingineria biomedicală", POINGBIO, ID P_40_443, cod MySMIS:105689, Contract de finanţare nr. 86/8.09.2016, Ctr. subsidiar nr. 6353/25.09.2017//392/28.09.2017, **Responsabil proiect**, 2017-2019

2. ERANET, ct. 51/2016, "Nanomateriale și arhitecturi inovatoare pentru aplicații integrate de captare a energiei piezoelectrice", **Director proiect**, 2016-2019

3. MANUNET ERA NET, nr. 7-038/2011, "Dezvoltarea de bio-senzori prin intermediul unei tehnologii inovative de electroacoperire a structurilor carbonice cu polimeri activi", **Responsabil proiect**, 2011-2014

4. Eureka traditional, nr. 308E/19.08.2011, „Dezvoltarea de panouri compozite izolatoare pe bază de deșeuri de fulgi/pene, pulbere de lemn și plastic reciclat pentru clădiri ecologice tip „conceptul cladirii verzi"", **Responsabil proiect**, 2011-2014

5. CNCSIS Td-118, ct. 344/2007, „Cercetări privind măsurarea numerică a impedanţelor", **Director proiect**, 2007-2008

L. Premii, distincţii

Program 5.2, Subprogram 5.2.3 - Premierea rezultatelor cercetarii - Articole Web of Science, Competitia 2023 pentru articolul:

Catalin-Paul Constantin, Luiza Madalina Gradinaru, **Olga Plopa**, Radu-Dan Rusu, Surface modification of polyimide films towards very low contact angles, Polymer Degradation and Stability, Volume 202, **2022**, Article Number: 110036, ISSN 0141-3910, Published: AUG 2022; Document Type: Article, https://doi.org/10.1016/j.polymdegradstab.2022.110036, ISSN: 0141-3910; eISSN: 1873-2321; **Journal Impact Factor ™** (2021) **5.204**, **WOS:000824494600003**. **(WoS, Scopus)**

M. Alte realizări semnificative

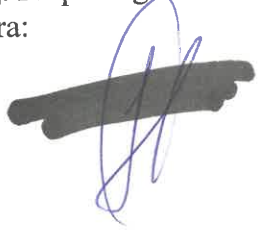
Membru în organizaţii profesionale: Membru SETIS - Societatea Absolvenților Facultății de Electrotehnică

Organizator de manifestări ştiinţifice:

- 15th International Conference on Electromechanical and Energy Systems (SIELMEN **2025**), Local secretary
- 13th International Conference on Electromechanical and Energy Systems - SIELMEN **2021**, Asistent editor
- 12th International Conference on Electromechanical And Energy Systems SIELMEN **2019**, Chairmen Sesiune de postere
- 2018 International Conference on Electrical and Power Engineering, EPE 2018, October 18-19 **2018**, Iaşi, Romania, Member
- SIELMEN 2017, 2017 International Conference on Electromechanical and Power Systems; 11-13 Oct. **2017**, Editor assistent.

Data: 29 septembrie 2025

S.l.dr.ing. Plopa Olga
Semnătura:



Anexa A.3.3.c. Lista de lucrări, cadre didactice

LISTA DE LUCRĂRI ÎN DOMENIUL DE STUDII UNIVERSITARE DE LICENȚĂAUTOMATICĂ ȘI INFORMATICĂ APLICATĂ

Numele și prenumele: Coman Tudor Bogdan

A. Teza de doctorat.

„Studiul straturilor subţiri de oxid de zinc dopat depuse prin ablaţie laser secvenţială"
Domeniul: Fizică
Data acordării titlului: 03.12.2013
Instituţia: Universitatea *Alexandru Ioan Cuza* din Iaşi

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

B1. **T.B. Coman**, M.M. Cazacu, G. Apreotesei, M. Prelipceanu, I. Radinschi, *In-person versus Virtual Activities - Assessing the Usefulness and Impact of Simulated Experiments, a Case Study*, capitol in volumul: „Biomedical Engineering Tools for Management for Patients with COVID-19", editori: V.E.Balas, O. Geman, G. Wang, M. Arif, O. Postolache, Editura: Academic Press - ELSEVIER, 2021, ISBN: 978-0-12-824473-9, pp. 73-86, DOI: https://doi.org/10.1016/B978-0-12-824473-9.00004-5

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

C1. M. Agop, G. Apreotesei, S. Băcăiță... – Îndrumar de lucrări practice pentru disciplina Fizică, Editura performantica, Iași, 2023, 174 pagini

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.
E1. Lucrări de laborator virtuale, fizică physics.phys.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F1. V. Pelin, I. Radinschi, V. Ciocan, I. Sandu, **T.B. Coman**, M.M. Cazacu, *Preliminary Evaluation of Coating Hydrophobization of Natural Stone from Repedea - Iasi area (Romania)*, Revista de Chimie 71, pp. 273-282, 2020

F2. G. Covatariu, I. Radinschi, V. Ciocan, M. Verdeș, V. Frățiman, M.M. Cazacu, **T.B. Coman**, *Analysis On The Use Of Javascript And Adobe Flashprograms For Teaching Physics In Civil Engineering*, Buletinul Institutului Politehnic din Iași, Vol. 65 (69), Numărul 4, 2019

F3. **T.Coman**, D.Timpu, V. Nica, C.Vitelaru, A. P.Rambu, G.Stoian, M.Olaru, C.Ursu, *Sequential PLD in oxygen/argon gas mixture of Al-doped ZnO thin films with improved electrical and optical properties*, Applied Surface Science 418, pp. 456-462, 2017

F4. **T.Coman**, E.L.Ursu, V.Nica, V.Tiron, M.Olaru, C.Cotofana, M.Dobromir, O.G.Dragos, A.Coroaba, N.Lupu, F.Caltun, C. Ursu, *Improving the uncommon (110) growing orientation of Al-*

doped ZnO thin films through sequential pulsed laser deposition, Thin Solid Films 571, 198-205, **2014**

F5. V. Tiron, **T. Coman**, L. Sîrghi, G. Popa, *Atomic force microscopy investigation of piezoelectric response of ZnO thin films deposited by HIPIMS*, Journal of Optoelectronics and Advanced Materials 15, 77-81, **2013**

F6. D. Mardare, N. Iftimie, M. Crişan, M. Răileanu, A. Yildiz, **T. Coman**, K. Pomoni, A. Vomvas, *Electrical conduction mechanism and gas sensing properties of Pd-doped TiO_2 films*, Journal of Non-Crystalline Solids 357, 1774-1779, **2011**

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I1. **T.B. Coman**, M.M. Cazacu, I. Radinschi, *Teaching strategy based on interactive use of computer simulations during covid-19 pandemic*, Proceedings of INTED2021 Conference, 10485-10490, 2021

I2. **T.B. Coman**, M.M. Cazacu, I. Radinschi, *Developing virtual tools to complement experiments in the physics laboratory*, Proceedings of INTED2021 Conference, 10499-10504, 2021

I3. W.M.W. Ibrahim, R. Ahmad, **B.T. Coman**, M.M.A.B. Abdullah, A. Puskas, V.S. Jaganathan, *The Effects of Solid to Liquid Ratio on Fly Ash Based Lightweight Geopolymer*, IOP Conf. Series: Materials Science and Engineering 877, 012013, 2020

I4. **T. Coman**, C. Munteanu, S.J. Talaşman, *Dispozitiv experimental pentru studiul undelor solitare*, Revista Ştiinţifică "V. Adamachi" Vol. 17, 60-62, 2008

I5. R.C. Frunză, **T. Coman**, C. Munteanu, L.P. Curecheriu, A. Ianculescu, L. Mitoşeriu, *The role of sintering temperature on the dielectric properties of Ba(Zr, Ti)O3 ceramics*, Revista Ştiinţifică "V.Adamachi" Vol. 17, 115-118, 2008

J. Invenţii.

J1. Procedeu de obținere a electrozilor flexibili și transparenți, cod brevet RO132874 (B1), Buletinul oficial de proprietate industrială/OSIM

K. Contracte de cercetare.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
03.10.2025
Ş.l. dr. Coman Tudor-Bogdan
Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Zvorișteanu Otilia

A. Teza de doctorat:

Environment perception and understanding for intelligent mobile systems (Percepția și înțelegerea mediului pentru sisteme mobile inteligente), 2023, Universitatea Tehnică "Gheorghe Asachi" din Iași, Calculatoare și tehnologia informației, prof. dr. ing. Vasile-Ion Manta

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

1. Environment perception and understanding in the context of intelligent mobile systems, Otilia Zvorișteanu, Editura Universității Tehnice "Gheorghe Asachi" din Iași, 2024
2. Rolul şi importanța lecturii în viața elevilor, Otilia Jacotă (Zvorișteanu) capitol în volumul Tendinţe actuale şi viitoare în educaţie şi societate: vocea tinerei generaţii (TAVES 2015), editura PIM, 2016
3. Educație pe acorduri muzicale, Irina Oancea, Ana-Maria Costea, Otilia Jacotă (Zvorișteanu), capitol în Prima conferință internațională EDUCAȚIE-PROFESIONALIZARE-CREAȚIE în societatea cunoașterii (EPC 2013), editura Performantica, 2013

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Compensation of Leg Length Discrepancy Using Computer Vision in a Self-Adaptive Transtibial Prosthesis, Dimitrie Cristian Fodor, Otilia Zvorișteanu, Dragoș Florin Chitariu, Adriana Munteanu, Ștefan Daniel Achirei, Vasile Ion Manta, Neculai Eugen Seghedin, Technologies 13 (8), 2025
2. Speeding Up Semantic Instance Segmentation by Using Motion Information, O. Zvorișteanu, S. Caraiman, V.I. Manta, Mathematics 10 (14), 2022
3. Sensory Substitution for the Visually Impaired: A Study on the Usability of the Sound of Vision System in Outdoor Environments, O. Zvorișteanu, S. Caraiman, R.-G. Lupu, N. A. Botezatu, A. Burlacu, Electronics 2021

4. Stereo Vision Based Sensory Substitution for the Visually Impaired, S. Caraiman, O. Zvoristeanu, A. Burlacu, P. Herghelegiu, Sensors 2019

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

1. Towards real-time semantic instance segmentation, O. Zvoristeanu, S. Caraiman, V. Manta, Conferința Internațională a Școlii Doctorale TUIASI, 2021

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Predicting Age from Brain Connectivity Matrix: A Stacked Regression Approach, G. Pojoga, V. Teslaru, O. Zvorișteanu, Ș.-D. Achirei, 2025 IEEE 19th International Symposium on Applied Computational Intelligence and Informatics (SACI)
2. Automated Estimation of the Edinburgh Visual Gait Score Using OpenPose System,E.-C. Maftei, O. Zvorișteanu, H.-N. Costin, S.-I. Bejinariu, F. Rotaru,2025 International Symposium on Signals, Circuits and Systems (ISSCS)
3. The Future of Therapy: A Study on Emotion Recognition Solutions Using NAO Robot, EC Maftei, O Zvorișteanu, International Conference on e-Health and Bioengineering, 728-736
4.. A Computer Vision-Based Solution for Assessing Prosthetic Leg Length Discrepancy, O Zvorișteanu, DC Fodor, VI Manta, NE Seghedin, ŞD Achirei, DF Chitariu, 2024 E-Health and Bioengineering Conference (EHB), 1-4
5. Deep Learning-Based Retinal Blood Vessel Segmentation Using U-Net Architecture, LG Boazu, MA Petraru, O Zvorișteanu, 2024 E-Health and Bioengineering Conference (EHB), 1-4
6. Enhancing Learning and Therapy for Children with Autism: Innovative Activities with the NAO Robot, IB Bulai, O Zvorișteanu, 2024 E-Health and Bioengineering Conference (EHB), 1-4
7. Automated Assessment of Medical Rehabilitation of Gait by Means of Video Processing in Cloud Environment, EC Maftei, O Zvorișteanu, HN Costin, S Bejinariu, F Rotaru, V Manta, R. Luca, 2024 E-Health and Bioengineering Conference (EHB), 1-4
8. Pothole Detection for Visually Impaired Assistance, S.D. Achirei O. Zvoristeanu, I.A. Opariuc, S. Caraiman, V.I. Manta, 2021 IEEE 17th International Conference on Intelligent Computer Communication and Processing (ICCP), 2021
9. Environment Understanding Framework for Intelligent Mobile Systems, O. Zvoristeanu, S.D. Achirei, S. Caraiman, V.I. Manta, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 2021
10. On improving perception for visually impaired: requirements, research and practicality, O. Zvoristeanu, S. D. Achirei, N. A. Botezatu, R. G. Lupu, A. Burlacu, S. Caraiman, EHB 2020
11. SMARTCARE: On the Design of an IoT Based Solution for Assisted Living, S. D. Achirei, O. Zvoristeanu, A. Alexandrescu, N. A. Botezatu, A. Stan, C. Rotariu, R.G. Lupu,

S. Caraiman, EHB 2020
12. Remote Monitoring of Physiological Parameters used in Ambient Assistive Technologies, S. D. Achirei, O. Zvoristeanu, A. Alexandrescu, N. A. Botezatu, A. Stan, C. Rotariu, R.G. Lupu, S. Caraiman, EHB 2020
13. Stereo vision based environment analysis and perception for autonomous driving applications, A. Burlacu, S. Caraiman, A. Cozma, E. Dobrincu, R. Lupu, R. Miron and O.Zvoristeanu, ICCP 2018, Cluj, România

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi
1. DIGITAL-2021-EDIH-01, eDIH-DIZ, responsabil de contract, 25 martie 2024 – prezent
2. HUB Român de Inteligență Artificială – HRIA", 25 martie 2025 – prezent
3. Terapeut Virtual bazat pe Imagerie Motorie pentru Recuperare Timpurie post-AVC, PN IV PTE, nr. 31 PTE/2025, membru, 16 iunie 2025 – 31 decembrie 2025
4. Tangrama Medvolution: Evoluăm împreună pentru o sănătate mai bună, redefinind inovația în medicină, proiecte de CDI și investiții în IMM, nr. 730/10.07.2025, membru, 23 septembrie 2025 – 09 iulie 2027
5. Sound of Vision – natural sense of vision through acoustics and haptics (SoV) - H2020-643636, membru, 1 octombrie 2016 – 31 decembrie 2017, responsabil TUIASI conf. dr. ing. Simona Caraima
6. taRgeted thErapy for advanced colorEctal canceR paTients (REVERT) - H2020-848098, membru, 17 februarie 2020 – 21 martie 2022, responsabil TUIASI ș.l. dr. ing. Paul Herghelegiu
7. Development of a World-Level Neuroengineering Research Center by European Twinning (BrainTwin) - H2020-952378, membru, 01 aprilie 2021 – 31 august 2023, responsabil TUIASI conf. dr. ing. Nicolae Lucanu
8. Substituție senzorială audio-haptică naturalistă, accesibilă și ergonomică pentru nevăzători (SoVLite), membru, 01 iulie 2020 – 31 mai 2022, responsabil TUIASI conf. dr. ing. Simona Cariman
9. Platforma integrativă pentru soluții de asistență pentru autonomie la domiciliu (SMARTCARE), membru, 01 iulie 2020 – 31 mai 2022, responsabil TUIASI conf. dr. ing. Simona Caraiman
10. Dezvoltarea unui sistem inovativ de recunoaștere a tiparelor materialelor pentru îmbunătățirea proceselor de tăiere în industria textilă, Ag. Ec. nr. 22586/2018, membru 01 decembrie – 31 ianuarie, responsabil TUIASI conf. dr. ing. Simona Caraiman

11. Dispozitiv purtabil de interacțiune prin stimulare vibro-tactilă (VibroWear), Nr. GI / MedTech_7/2022, Proiecte de inovare MEDTECH-PROOF of CONCEPT, Finantare prin Proiect CNFIS-FDI-2022-0460 şi Venituri Proprii TUIASI

L. Premii, distincţii

1. Bursă ANIS, categoria Machine Learning/Deep Learning, pentru laboratorul Sisteme de Vedere Artificială,noiembrie 2021
2. Bursă ANIS, categoria Machine Learning/Deep Learning, pentru laboratorul Prelucrarea Imaginilor – Proiect, noiembrie 2022
3. Best paper award for PhD students for the paper - Environment Understanding Framework for Intelligent Mobile Systems, O Zvoristeanu, SD Achirei, S Caraiman, VI Manta – obținut în cadrul conferinței ICSTCC 2021
4. Young Researcher Third Prize – "On improving perception for visually impaired: requirements, research and practicality", obținut în cadrul conferinței EHB 2020

M. Alte realizări semnificative

1. Ambasadaor universitar NVIDIA din 10 ianuarie 2025
2. Instructor certificat NVIDIA pentru cursurile Fundamentals of Machine Learning, Fundamentals of Accelerated Computing with Modern CUDA C++

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

1. From problem to prototype: needs-based AI innovation through EDIH-University collaboration, chair & presenter speaker, AI, Data, Robotics Forum ADRF 2025, 22-24 septembrie 2025

Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Zvorișteanu Otilia

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Lupaşcu Codrin-Alexandru

A. Teza de doctorat: Novel Reservoir Computing architectures and learning algorithms

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

1. Teoria Sistemelor – Curs 2025-2026
2. Teoria Sistemelor – Aplicații 2025-2026
3. Machine Learning – Aplicații 2025-2026

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. C.A. Lupascu, S.C. Nechita, O. Pastravanu, Dual switched positive systems–a less conservative condition for diagonal quadratic stability, *International Journal of Systems Science*, 2019, 50(13):2529-38 (DOI: 10.1080/00207721.2019.1671533). (**IF: 4.6 – Q1**)

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. **C.A. Lupascu**, D. Coca, O. Pastravanu, A novel architecture – Switching Echo State Networks, *2024 IEEE International Conference on Automation, Quality and Testing, Robotics* (AQTR), Cluj-Napoca, 2024 (IEEE *Xplore,* DOI: 10.1109/AQTR61889.2024.10554207)

2. S.C. Nechita, **C.A. Lupascu**, O. Pastravanu, On spectrum location of discrete-time systems with polytopic uncertainties, 21*st International Conference on Control*

Systems and Computer Science (CSCS 2017), Bucharest, 2017 (IEEE *Xplore*, DOI: 10.1109/CSCS.2017.14).

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

1. **Mebru al proiectului de cercetare** cu titlul "Trusted Data Initiative" de la Defence Science and Technology Laboratory", responsabil partener University of Sheffield, perioada de desfăşurare 01.01.2021 – 31.03.2021.

Organizator de manifestări ştiinţifice:

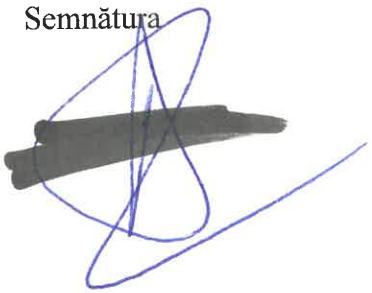
Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Numele şi prenumele

Asist. Univ. dr. ing. Lupaşcu Codrin-Alexandru

Semnătura



Anexa II.09.b - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Lazăr Corneliu

A. Teza de doctorat.

Lazar C., *Noi tehnici de prelucrare a semnalelor bidimensionale în vederea recunoașterii imaginilor cu aplicații în automatizări industriale*, Universitatea Tehnică „Gheorghe Asachi" din Iași, 1991. (specializarea *Sisteme automate*)

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. **Lazar C.**, Burlacu A. (2016), A Control Predictive Framework for Image based Visual Servoing Applications, Chapter in Borangiu T. (Ed.), Advances in Robot Design and Intelligent Control, Book series: *Advances in Intelligent Systems and Computing*, 371, Springer, pp. 185-193.
2. **Lazar, C.**, Burlacu, A., Archip (2014), A.,Vision-guided robot manipulation predictive control for automating manufacturing, Chapter in *Service Orientation in Holonic and Multi-Agent Manufacturing and Robotics*, T. Borangiu et al. (eds.), Studies in Computational Intelligence, 544, Springer Verlag, pp. 313-328.
3. Copot C., **Lazar C.**, Burlacu A., (2013), Nonlinear Model Based Predictive Control of Visual Servoing Systems Using Image Moments, Chapter in Dumitrache I. (Ed.), *Advances in Intelligent Control Systems and Computer Science,* Volume: 187, Springer, pp. 115-128
4. De Keyser R., Ionescu C. **Lazar C.** (2010). Frequency Response Based CACSD for Fractional Order Systems, Chapter in Baleanu D., Güvenç Z. B. and Machado J.A.T. (Eds.), *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, 5, pp. 419-427
5. Baluta Gh.,**Lazar C.** (2008), Networked Control Systems for Electrical Drives. Chapter in *New Approaches in Automation and Robotics,* Harald Aschemann (Ed.), I-Tech Education and Publishing, Vienna, pp. 73 - 92, ISBN 978-3-902613-26-4.
6. **Lazar C.**, (2004), Future trends in model predictive control, Chapter in Voicu M. (Ed), *Advances in Automatic Control*, Volume: 754, Kluwer, Pages:211-224.
7. **Lazar, C**; Ganciu, T; Balaban, E; et al. (2004), Brief history of the automatic control degree course at Technical University "Gh. Asachi" of Iasi, Chapter in Voicu M. (Ed), *Advances in Automatic Control*, Volume: **754**, Kluwer, Pages: 435-444
8. **Lazăr C.**, D. Pănescu, A. Laczko, C. Brăescu (2004), *Vision-Based Integrated System for Robotic Assembly*, Chapter in Borangiu T., Kopacek P. (Eds.):Intelligent Assembly and Disassembly, Elsevier, pp.113-118, ISBN 0-08-044065-7.
9. **Lazăr C.**, E. Poli, Fr. Schömberger, S. Ifrim (1997), *Microcomputer-Based Implementations for DC MOTOR Drive Control.*Chapter in P. Albertos, R. S. Strietzel, N. Mort (Eds.), Control Engineering Solutions: A Practical Approach, The Institution of Electrical Engineers, London, pp. 261-272, 1997, ISBN 0-85296-829-9.
10. Voicu M., **Lazăr C.**, Schonberger F., Păstrăvanu O., Ifrim S. (1997), *Predictive control of thermal treatment processes*. Chapter in P. Albertos, R. S. Strietzel, N. Mort (Eds.), Control

Engineering Solutions – A Practical Aproach, The Institution of Electrical Engineers, London, pp.162-174, ISBN 0-85296-829-9.
11. Păstrăvanu O., **Lazăr C.** (1992), *A Professionally-Desillusioned Generation – Can There Be Found Any Remedies?*. Chapterin J. Froslin and P. Kopacek (Eds.) Cultural Aspects of Automation, Springer- Verlag, Wien, New York, pp. 77 -80, 1992, ISBN 3-211-82362-X.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Maxim A., Păucă O., **Lazăr C.**, *Ingineria reglării automate – Îndrumar de laborator*, Ed. MatrixRom, Bucureşti, 2024, ISBN 978-606-25-0935-4.
2. Burlacu A., Condurachi D., **Lazar C.**, (2021) *Motion Parametrization and Control: Advances and Applications*, Matrix Rom, Bucureşti, 2021, ISBN: 978-606-25-0653-7.
3. Caruntu C. Maxim A., **Lazăr C.**, *Advanced control strategies for networked/distributed systems – theory and applications*, Ed. MatrixRom, Bucureşti, 2019, ISBN 978-606-250-504-2.
4. Caruntu C. F. , **C. Lazăr**, *Modelare si control predictiv*, Ed. Politehnium, 2013, ISBN 978-973-621-413-4
5. Caruntu C. F., C. Budaciu, **C. Lazăr**, *Ingineria Reglarii Automate – îndrumar laborator*, Ed. Politehnium, 2013, ISBN 978-973-621-414-1
6. Aleodor I.D., **Lazar C.**, *Transmisia datelor - Consideratii teoretice si experimente de laborator*,Ed. Politehnium, Iasi, 2009.
7. **Lazăr C.**, D. Vrabie, S. Carari,.*Sisteme automate cu regulatoare PID*, Ed. MatrixRom, Bucuresti, 2004, ISBN 973-685-867-7
8. **Lazăr C.**: *Conducerea predictivă a proceselor cu model cunoscut.* Ed. Matrix Rom, Bucureşti, 1999, ISBN 973-685-139-7
9. **Lazăr C.**, O. Păstrăvanu, E. Poli, Fr. Schömberger: *Conducerea asistată de calculator a proceselor tehnice - proiectarea şi implementarea algoritmilor de reglare numerică,* Ed. Matrix Rom, Bucureşti, 1996, ISBN 973-97-494-6-1

1. Manta V., **Lazar C.** (Eds.), *Proceedings of 9th International Symposium on Automatic Control and Computer Science*, Iasi, November 16-17, 2007, Editura Politehnium, Iasi, ISSN 1843-7257.
2. **Lazăr C.** (Ed.): *Proc. of 6th International Symposium on Automatic Control and Computer Science- Automatic Control*, , MatrixRom, Bucureşti, 1998, ISBN 973-9390-42-0
3. Boţan C., **Lazăr C.**, Grigoraş D., (Eds.): *Proc. of 5th International Symposium on Automatic Control and Computer Science*, Universitate Tehnică Iaşi, 1995
4. Boţan C., **Lazăr C.**, Grigoraş D.,Olaru D. (Eds): *Proc. of 4th International Symposium on Automatic Control and Computer Science*, Universitate Tehnică Iaşi, 1993

1. **Lazar C.**, Reglarea predictivă, Capitol in *Automatica vol II*, Ed. I. Dumitrache, T. Dragomir, Ed. Academiei Române, 2013, pp. 506-550, ISBN 978-973-27-2298-5
2. Bejan I., Voicu M., **Lazăr C.**, Pal C., Asandei D., Leca M., Popescu D., Aspecte ale preşi postprocesării imaginilor TV pentru sisteme cu inteligenţă artificială. Capitol in Manescu M., Florescu M., Niculescu-Mizil E. (Editori), *Cibernetica si Revolutia Tehnico-Stiintifica*, Editura Academiei, Bucureşti, 1987, pp. 605-609.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. **Lazăr C.**, *Ingineria reglării automate – Proiectarea sistemelor de reglare automată liniare, continue,şi monovariabile,* Universitatea Tehnică Iaşi, 1998.
2. Olah I., Mastacan L., **Lazăr C.**, *Echipamente şi structuri convenţionale de automatizare*, Îndrumar de laborator, Universitatea Tehnică Iaşi, 1998 (222 pag.).
3. **Lazăr C.**, *Ingineria reglării automate – Proiectarea structurilor numerice de reglare,* Universitatea Tehnică Iaşi, 1995.
4. Voicu M., **Lazăr C.**, *Sisteme de conducere a roboţilor industriali* vol.3, Institutul Politehnic Iasi, 1987.

E. Cărţi (manuale, monografii, tratate, îndrumare, etc.) publicate pe web.

1. **Lazar C.**, Ingineria reglarii automate, note de curs, TUIasi, http://automatica.ac.tuiasi.ro/course/view.php?id=87
2. **Lazar C.**, Sisteme de vedere artificiala, note de curs, TUIasi, http://automatica.ac.tuiasi.ro/course/view.php?id=31
3. **Lazar C.** Controlul sistemelor auto, note de curs, TUIasi, http://automatica.ac.tuiasi.ro/course/view.php?id=97
4. **Lazar C., Tehnici avansate de acordare a regulatoarelor PID,** curs post univ., 2012. http://iasi.comhightech.ro/course/category.php?id=7
5. **Lazăr C.**, C.F. Caruntu, Controlul predictiv al structurilor de reglare in retea, curs post univ., 2012. http://iasi.comhightech.ro/course/category.php?id=3

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Baciu, A.; **Lazar, C.** (2025), Gradient vs. Non-Gradient-Based Model Free Control Algorithms: Analysis and Applications to Nonlinear Systems, *Applied Sciences-Bassel*, 15(5), 2766.
2. Costin, M., **Lazar, C.**, (2024), Induction Motor Improved Vector Control Using Predictive and Model-Free Algorithms Together with Homotopy-Based Feedback Linearization. E*nergies* 2024, *17*, 875.
3. Baciu, A.; **Lazar, C.** (2024), Model-Free Temperature Control of Heat Treatment Process. *Energies* 2024, 17, 3679.
4. Baciu A., **Lazar C.** (2023), Iterative Feedback Tuning of Model-Free Intelligent PID Controllers, *Actuators*, 12 (2), 2023, article no. 56. (DOI: 10.3390/act12020056)
5. Costin M., **Lazar C.** (2023),Field-Oriented Predictive Control Structure for Synchronous Reluctance Motors, *Machines*, 11 (7), 2023, article no. 682.
6. Tiganasu A., **Lazar C.**, Caruntu C.F., Dosoftei C. (2021), Comparative Analysis of Advanced Cooperative Adaptive Cruise Control Algorithms for Vehicular Cyber Physical Systems, *Journal of Control Engineering and Applied Informatics*, 23 (1), pp. 82-92.
7. Carpiuc S.C., **Lazar C.**, (2017), Modeling of synchronous electric machines for real–time simulation and automotive applications, *Journal of the Franklin Institute*, 354 (14), pp. 6258-6281.
8. Carpiuc S.C., **Lazar C.**, (2016),Real-Time Multi-Rate Predictive Cascade Speed Control of Synchronous Machines in Automotive Electrical Traction Drives, *IEEE Trans. on Industrial Electronics* 63 (8), pp. 5133-5142.

9. Carpiuc S. C., **Lazar C.** (2015). Fast Real-Time Constrained Predictive Current Control in Permanent Magnet Synchronous Machine-Based Automotive Traction Drives, *IEEE Trans. on Transportation Electrification*, 1 (4), 326 – 335.
10. Carpiuc S.C., **Lazar C.**, (2015),Real-time constrained current control of permanent magnet synchronous machines for automotive applications, *IET Control Theory and Applications,* 9 (2), 248-257.
11. F. C. Braescu, L. Ferariu, **C. Lazar**,(2014), Multi-Domain CAN Gateway with Monitoring Capabilities, *Journal of Control Engineering and Applied Informatics*, 16(2), pp. 49-57.
12. CF Caruntu, **C Lazar**, (2014), Network delay predictive compensation based on time-delay modelling as disturbance, *International Journal of Control*, 87 (10), pp. 2012-2026.
13. Burlacu A., Copot C., **Lazar C.** (2014),*Predictive control architecture for real-time image moments based servoing of robot manipulators,Journal of Intelligent Manufacturing*, 25 (5), pp. 1125-1134.
14. C. Copot, A. Burlacu, C. M. Ionescu , C. Lazar, R. De Keyser (2013), A fractional order control strategy for visual servoing systems, *Mechatronics*, 23, 848–855, ISSN 0957-4158.
15. S. Carpiuc,**C. Lazar**, D.Patrascu (2012). Optimal Torque Control of the Externally Excited Synchronous Machine, *Control Engineering and Applied Informatics*, 14 (2), 80-89.
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K. Contracte de cercetare/granturi.

- *Internationale*

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- *Castigate prin competitii nationale*

1. **Lazar C.** (director grant), E. Oltean (responsabil UPBucureşti), R.E. Precup (responsabil UPTimişoara), G. Costeniuc (responsabil Continantal Automotive Romania): *Tehnologii informatice de timp real pentru sistemele incorporate care asigura controlul lantului de transmisie a puterii la autovehicule*, Grant CNMP, PNII- Programul 4, Contract nr. 12100/01.10.2008; 2008-2011.
2. **C. Lazăr** (director grant): *Tehnici avansate bazate pe vederea artificiala pentru conducerea roboţilor,* Cod CNCSIS A232, 2007-2008. Finanţare: M.E.C.
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L. Premii, distincţii.

1. UEFISCDI_Premierea rezultatelor cercetarii - Articol in zona rosie, Competitia 2017_PN-III-P1-.1-PRECISI-2017-17843 (Carpiuc S.C., **Lazar C.**, (2016),Real-Time Multi-Rate Predictive Cascade Speed Control of Synchronous Machines in Automotive Electrical Traction Drives, IEEE Trans. on Industrial Electronics 63 (8), pp. 5133-5142)
2. UEFISCDI_Premierea rezultatelor cercetarii - Articol in zona rosie, Competitia 2017_PN-III-P1-.1-PRECISI-2017-20217 (Carpiuc S.C., **Lazar C.**, (2017), Modeling of synchronous electric machines for real–time simulation and automotive applications, Journal of the Franklin Institute, 354 (14), pp. 6258-6281)
3. Lucrarea Simulation and control of an electro-hydraulic actuated clutch (Bălău A.E., C.F. Căruntu and **C. Lazăr**), publicată în revista Mechanical Systems and Signal Processing a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 25% reviste din subdomeniul ISI: Engineering, Mechanical. (2013)
4. Lucrarea Robustly stabilising model predictive control design for networked control systems with an application to direct current motors (Căruntu C.F. and **C. Lazăr**) publicată în revista IET Control Theory and Applications a fost acceptata pentru premiere de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: Engineering, Mechanical (2013)
5. Lucrarea *Predictive Control of Nonlinear Visual Servoing Systems using Image Moments*, (C. Copot, **C. Lazar**, A. Burlacu – 2012) publicată în revista *IET Control Theory and Applications*, a fost premiată de către UEFISCI în programul de "premiere a rezultatelor cercetării", revista fiind clasată între primele 50% reviste din subdomeniul ISI: *Engineering, Mechanical*.
6. Paper "Distributed control systems for educational training based on Lookout and FieldPoint" (Carari S., Chirea O., **Lazar C.**) awarded by National Instruments as Academic Category Finalist at *NIWeek 2003 Virtual Instrumentation Applications Paper Contest*
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M. Alte realizări semnificative.

Membru în organizaţii profesionale:

- membru titular al Academiei de Științe Tehnice din România
- membru al Societăţii Române de Automatică şi Informatică Tehnică;
- membru al Societății de Robotică din România
- membru IEEE (Control Systems Society - CSS, Industrial Electronics Society - IES, Robotics & Automation Society- RAS);
- membru al TC 7.1 IFAC (Automotive Control)

Organizator de manifestări ştiinţifice:
- co-chair - 24th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2015, Bucharest, Romania, 27-29 May 2015
- co-chair - 18th International Conference on System Theory, Control and Computing, ICSTCC 2014, Sinaia, Romania, 17-19 October 2014
-

Data: 29/09/2025

Prof.univ.em.dr.ing. Corneliu Lazăr

Lucrări ştiinţifice, cărţi şi brevete în domeniul disciplinelor din postul didactic Prof.dr.ing. Cristea Pal

A. Teza de doctorat

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F. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. **Sisteme de conducere a robotilor industriali.**
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2. **Echipamente hidraulice si pneumatice de automatizare.**
   Autor :**C.Pal**
   Editura Rotaprint,Iasi , 1986

3. **Echipamente hidraulice si pneumatice de automatizare indrumar pentru lucrari de laborator**
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   Editura Rotaprint,Iasi, 1981

4. **Protectia prin relee indrumar de laborator.**
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5. **Automatizari in energetica indrumar de laborator.**
   Autori I.Bejan, G. Balaban, M. Voicu, **C. Pal**, D. Asandei
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6. **Cercetari privind modulatorul magnetic cu iesirea la frecventa dubla.**
   Autori: I. Bejan, G. Balaban, I. Titariu , M. Voicu, **C. Pal**, D. Asandei
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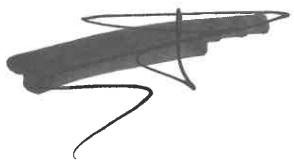
16.09.2025

Prof.dr.ing. Cristea Pal



Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

A. Teza de doctorat.

"Contribuţii privind reglarea proceselor cu regulatoare cu logică fuzzy", 1999, specializarea Sisteme Automate, îndrumător prof.dr.ing. Olah Iosif

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Mastacan L., Olah I., Echipamente şi structuri de reglare automată, îndrumar de laborator, Ed. Conspress, Bucureşti, 2013, 340 pag, ISBN 978-973-100-269-9.
2. Pricop A., Postolache M., Mastacan L., Platformă de automatizare şi simulare a proceselor industriale, Ed. Conspress, Bucureşti, 2013, ISBN 978-973-100-283-5.
3. Mastacan L., Senzori şi traductoare, Editura Politehnium, Iasi, 2012, 244 pag., ISBN 978-973-621-193-5.
4. Olah I., Pal C., Mastacan L., Dosoftei C.C., Procese şi instalaţii energetice nepoluante, Editura Politehnium, Iasi, 2009, 301 pag., ISBN 978-973-621-164-5.
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6. Olah I., Pal C., Mastacan L., Aniţa L., Procese şi instalaţii energetice cu conversie termodinamică, Editura Matrix Rom, Bucureşti, 228 pag., 2005, ISBN 973-685-929-0.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Mastacan L., Elemente de execuţie electrice, Universitatea Tehnică "Gh. Asachi" Iaşi, 154 pag., 2000;
2. Olah I., Mastacan L., Lazăr C., Echipamente şi structuri convenţionale de automatizare, îndrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi, 222 pag., 1998.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

1. Mastacan, L., Olah, I., Dosoftei, C., Soft computing method for speed control of mechatronic systems with DC servomotors, Romanian, Review Precision Mechanics, Optics and Mecatronics, n 39, p 78-81, 2011, ISSN 1584-5982.
2. Dosoftei, C., Mastacan, L., Dsp motor fuzzy control application, Romanian Review Precision Mechanics, Optics and Mecatronics, n 39, p 25-28, 2011, ISSN 1584-5982.
3. Mastacan, L., Olah, I., Dosoftei, C., Temperature Fuzzy Control Using Virtual Instrumentation, Buletinul Institutului Politehnic Iasi - Electrotehnică, Energetică, Electronică, LIV (LVIII), Fasc. 4, pp. 623-628, 2008, ISSN 1223-8139.
4. Mastacan, L., New Methods to Improve Fuzzy Logic Controllers Performance, Buletinul Institutului Politehnic Iasi - Electrotehnică, Energetică, Electronică, LIV (LVIII), Fasc. 4, pp. 629-634, 2008, ISSN 1223-8139.
5. Mastacan L., Olah I., Dosoftei C. C., District Heating Substations Water Temperature Control Based on Soft Computing Technology. Analele Universităţii din Craiova, Seria Inginerie Electrică, Anul 31, nr. 31, 2007, vol. I, pp. 172-175, ISSN 1842-4805.

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J. Invenţii.

K. Contracte de cercetare/granturi.

1. Reţea de centre pentru dezvoltarea programelor de studii cu rute flexibile şi a unor instrumente didactice la specializarea de licenţă şi masterat, din domeniul Ingineria Sistemelor, POSDRU/86/1.2/S/63806, 2010-2013, partener principal Universitatea Tehnică de Construcţii din Bucureşti, responsabil proiect Partener 4 TUIaşi prof.dr.ing. Mihail Voicu.
2. FLEXFORM – Program de formare profesională flexibilă pe platforme mecatronice, POSDRU/87/1.3/S/64069, 2011-2013, partener principal Universitatea Tehnică din Cluj - Napoca, responsabil proiect Partener TUIaşi conf.dr.ing. Gheorghe Prisacaru.
3. Sisteme inteligente şi metode pentru optimizarea, monitorizarea şi controlul retelelor de termoficare. Grant CEEX nr. 71/2006–2008; director proiect conf.dr.ing. Daniela Popescu.
4. Laborator virtual de actionari electrice de mica putere cu utilizare de la distanta prin internet (LVAEMP-INTERNET). Grant CNCSIS de tip A, nr. 63/2006-2008, director proiect prof.dr.ing. Gheorghe Băluţă.
5. Creşterea performanţelor centralelor electrice de termoficare utilizând tehnici de inteligenţă computaţională; Grant CNCSIS tip A, 510/2005 – 2007; director proiect conf.dr.ing. Lucian Mastacan.
6. Metode avansate de control pentru eficientizarea producerii şi utilizarii energiei; Grant CEEX nr. 603/2005 – 2007; director proiect prof.dr.ing. Corneliu Boţan.
7. Integrarea Petri Net Toolbox cu mediul Simulink şi crearea de noi instrumente software, cu largă aplicabilitate în studierea dinamicilor hibride. Grant CNCSIS tip A, nr. 33371/2004, director proiect prof.dr.ing. Octavian Păstrăvanu.
8. Modernizarea învăţământului de scurtă durată de la Facultatea de Automatică şi Calculatoare a Universităţii Tehnice "Gh. Asachi" din Iaşi ; Grant CNFIS: Nr.58, Runda 4, Contract nr: 45190/18.12.2000; director proiect prof.dr.ing. Teoharie Ganciu.
9. Laborator pentru conducerea sistemelor de acţionare electrică. Grant CNFIS: 2-MU-2-0105; Contract 12839/1998; director proiect prof.dr.ing. Corneliu Boţan.
10. Optimizarea regimurilor termice pentru accelerarea întăririi betoanelor folosind energia solară cumulată cu o sursă suplimentară de energie; Contract nr. 8483/1988, beneficiar TAGCM Iaşi.
11. Cercetări privind aplicarea motoarelor liniare la mecanizarea operaţiilor de stivuire a bricheţilor pe vagoneţi de la cuptoarele tunel de semnalizare – proiect de execuţie. Contract nr. 8272/1988, beneficiar Întreprinderea pentru materiale refractare Pleaşa, Ploieşti.
12. Tehnologii de accelerare a întăririi betoanelor folosind apa caldă încălzită prin captarea

energiei solare. Contract nr. 10524/1988, beneficiar TAGCM Iaşi.

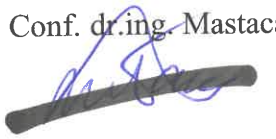
13. Tehnologii noi pentru accelerarea întăririi betonului pe standuri cu încălzire alimentate cu energie solară. Contract nr. 1273/1988, beneficiar TAGCM Iaşi.
14. Utilizarea energiei solare la tratarea termică a betoanelor cu controlul nivelului de întărire şi automatizarea dirijării proceselor pe poligoane şi şantiere: a) folosind efectul solar; b) folosind apa caldă. Contract nr. 10456/1987, beneficiar TAGCM Iaşi.
15. Manipulator acţionat cu motor liniar de inducţie pentru alimentarea utilajelor de consolidare chimică a textilelor neţesute ROBLIN 05 – (prototip omologat). Contract nr. 15506/1987, beneficiar Întreprinderea NETEX Bistriţa.
16. Proiectarea şi realizarea unui regulator tripoziţional de temperatură şi a unui stand pentru încercarea regulatoarelor tripoziţionale – (prototip omologat). Contract nr. 4655/1986, beneficiar ITRD Paşcani.
17. Cercetări privind utilizarea ferofluidelor la măsurarea înclinărilor mici- (prototip omologat). Contract nr. 4182/1985, beneficiar CUG Iaşi.
18. Sisteme electrice de transport acţionate cu motoare liniare de inducţie- (prototip realizat). Contract nr. 523/1985, beneficiar CCSIT Electroputere Craiova.
19. Robot de transport acţionat cu motor liniar ROBLIN 04 – partea mecanică. Contract nr. 8020/1985, beneficiar IMAMUS Iaşi.
20. Sisteme electrice de transport acţionate cu motoare liniare de inducţie. Contract nr. 3067/1984, beneficiar Electroputere Craiova.
21. Module de translaţie acţionate electric cu motoare liniare de inducţie ROBLIN 01, ROBLIN 02 – (prototipuri omologate). Contract 5535/1983, beneficiar I.C.P.E. filiala Iaşi.
22. Modul de transport interoperaţii cu motor liniar de inducţie ROBLIN 03– (pototip omologat). Contract nr 5343/1983, beneficiar I.C.P.E. filiala Iaşi.
23. Sisteme electrice de transport acţionate cu motor liniar de inducţie. Contract nr. 284/1983, beneficiar Întreprinderea Electroputere Craiova.

L. Premii, distincţii.

M. Alte realizări semnificative.

02.10.2025

Conf. dr.ing. Mastacan Lucian



Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Asăndulesă Mihai-Gabriel

A. Teza de doctorat: Procese fizico-chimice în reactori cu plasmă. Aplicații

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Ionut Topala, **Mihai Asandulesa,** Nicoleta Dumitrascu, Gheorghe Popa, Jean Durand, Application of dielectric barrier discharge for plasma polymerization processes, *Journal of Optoelectronics and Advanced Materials,* 10(8) (2008) 2028-2032;

2. Ionut Topala, **Mihai Asandulesa,** Delia Spridon, Nicoleta Dumitrascu, Hydrophobic coatings obtained in atmospheric pressure plasma, *IEEE Transactions on Plasma Science,* 37 (6) (2009) 946-950;

3. **Mihai Asandulesa,** Ionut Topala, N. Dumitrascu, Effect of helium DBD plasma treatment on the surface of wood samples, *Holzforschung,* 64 (2010) 223-227;

4. Roman Schrittwieser, Codrina Ionita, A. Murawski, Christian Maszl, **Mihai Asandulesa,** Andrei Nastuta, George Rusu, Claire Douat, S. B. Olenici, I. Vojvodic, Marius Dobromir, Dumitru Luca, Stefan Jaksch, Paul Scheier, Cavity-hollow cathode-sputtering source for titanium films, *Journal of Plasma Physics,* 76 (2010) 655-664;

5. **Mihai Asandulesa,** Ionut Topala, Valentin Pohoata, Nicoleta Dumitrascu, Influence of operational parameters on plasma polymerization process at atmospheric pressure, *Journal of Applied Physics,* 108 (2010) 093310;

6. Jorge Gonzalez Vazquez, **Mihai Asandulesa,** Ionut Topala, Nicoleta Dumitrascu, Fast imaging study of polymerization plasmas at atmospheric pressure, *IEEE Transactions on Plasma Science,* 39(11) (2011) 2170-2171;

7. **Mihai Asandulesa,** Ionut Topala, Valentin Pohoata, Yves Marie Legrand, Marius Dobromir, Marian Totolin, Nicoleta Dumitrascu, Chemically polymerization mechanism of aromatic compounds under atmospheric pressure plasma conditions, *Plasma Processes and Polymers,* 10 (2012) 469-480;

8. George Bogdan Rusu, **Mihai Asandulesa,** Ionut Topala, Valentin Pohoata, Nicoleta Dumitrascu, Mihai Barboiu, Atmospheric pressure plasma polymers for tuned QCM detection of protein adhesion, Biosensors and Bioelectronics, 53 (2014) 154-159;

9. **Mihai Asandulesa,** Ionut Topala, Yves-Marie Legrand, Stephanie Roualdes, Vincent Rouessac, Valeria Harabagiu, Chemical Investigation on Various Aromatic Compounds Polymerization in Low Pressure Helium Plasma, *Plasma Chemistry and Plasma Processing,* 34(5) (2014) 1219-1232;

10. Sergei Bronnikov, Alexander Podshivalov, Sergei Kostromin, **Mihai Asandulesa,** Vasile Cozan, Dielectric spectroscopy innvestigation on relaxation in polyazomethine/fullerene C60 nanocomposites, *European Polymer Journal,* 78 (2016) 213-225;

11. Corneliu Hamciuc, Elena Hamciuc, Tachita Vlad-Bubulac, Stelian Vlad, **Mihai Asandulesa,** Aleksandra Wolinska-Granczyk, Silica-containing polyetherimide hybrid films based on methyltriethoxysilane as precursor of inorganic network, *Polymer Testing,* 52 (2016) 94-103;

12. Vera Balan, **Mihai Asandulesa,** Elena Butnaru, Aurica P. Chiriac, Nita Tudorachi, Loredana Elena Nita, Iordana Neamtu, Alina Diaconu, Investigation on the properties of poly (2- hydroxyethyl methacrylate-co-3,9-divinyl-2,4,8,10- tetraoxaspiro (5.5) undecane) as a functional polymeric system, *Revue Roumaine de Chimie,* 61(8-9) (2016) 689-698;

13. Daniela Filip, **Mihai Asandulesa,** Doina Macocinschi, Magda Aflori, Stelian Vlad, Molecular dynamics, conductivity and morphology of sodium deoxycholate-based poly(ester ether)urethane ionomer biomaterials, *Journal of Materials Science,* 51 (2016) 8516-8528 (2016);

14. Aurica P. Chiriac, Vera Balan, **Mihai Asandulesa,** Elena Butnaru, Nita Tudorachi, Elena Stoleru, Loredana Elena Nita, Iordana Neamtu, Alina Diaconu, Investigation of thermal, rheological, dielectric and spectroscopic properties of a polymer containing pendant spiroacetal moieties, *Materials Chemistry and Physics,* 180, (2016) 291-300;

15. Roxana Stanculescu, Nadejda Horchidan, Carmen Galassi, **Mihai Asandulesa,** Leontin Padurariu, Cristina Ciomaga, Liliana Mitoseriu, Porous (Ba,Sr)TiO3 ceramics for tailoring dielectric and tunability properties: Modelling and experiment, *Processing and Application of Ceramics,* 11(4) (2017) 235-246;

16. Loredana Elena Nita, Aurica P. Chiriac, Maria Bercea, **Mihai Asandulesa,** Bernhard Anton Wolf, Self-assembling of poly(aspartic acid) with bovine serum albumin in aqueous solutions, *International Journal of Biological Macromolecules,* 95 (2017) 412-420;

17. Loredana Elena Nita, Aurica P. Chiriac, Alina Diaconu, **Mihai Asandulesa,** Preparation of protein-polyelectrolyte complex by self-assembling, *Revue Roumaine de Chimie,* 62(2) (2017) 99-106;

18. Sergei Bronnikov, Alexandr Podshivalov, Sergei Kostromin, **Mihai Asandulesa,** Vasile Cozan, Electrical conductivity of polyazomethine/fullerene C-60 nanocomposites, *Physics Letters A,* 381(8) (2017) 796-800;

19. Alina Gabriela Rusu, Alina Diaconu, Nita Tudorachi, **Mihai Asandulesa,** Loredana Elena Nita, Mihaela Cristea, Iordana Neamtu, Aurica P. Chiriac, Comparative studies regarding the impact of the synthesys possibilities of the physic-chemical properties of poly (N,N-dimethylaminoethyl methacrylate), *Revue Roumaine de Chimie,* 62(4-5) (2017) 399-412;

20. Carmen Racles, Mihaela Dascalu, Adrian Bele, Vasile Tiron, **Mihai Asandulesa,** Codrin Tugui, Ana-Lavinia Vasiliu, Maria Cazacu, All-silicone elastic composites with counter-intuitive piezoelectric response, designed for electromechanical applications, *Journal of Materials Chemistry C,* 5(28) (2017) 6997-7010;

21. Codrin Tugui, Cristian Ursu, Liviu Sacarescu, **Mihai Asandulesa,** George Stoian, Gabriel Ababei, Maria Cazacu, Stretchable energy harvesting devices: attempts to produce high performance electrodes, *ACS Sustainable Chemistry & Engineering,* 5(9) (2017) 7851-7858;

22. Georgeta Cazacu, Raluca Nicoleta Darie-Nita, Oana Chirila, Marian Totolin, **Mihai Asandulesa,** Diana Elena Ciolacu, Joanna Ludwiczak, Cornelia Vasile, Environmentally friendly polylactic acid/modified lignosulfonate biocomposites, *Journal of Polymers and the Environment,* 25(3) (2017) 884-902;

23. Sergei Bronnikov, **Mihai Asandulesa,** Sergei Kostromin, Alexandr Podshivalov, Vasile Cozan, Relaxation processes in side-chain polyazomethine/thermally reduced graphene oxide nanocomposites, *European Polymer Journal,* 96 (2017) 119-133;

24. Corneliu Hamciuc, Elena Hamciuc, **Mihai Asandulesa,** Yuri Kalvachev, Lubomir Dimitrov, Mircea Ignat, Study on dielectric behavior and harvesting properties of new Ba0.5Sr0.4Ca0.1TiO3/poly(ether imide) composite films, *Materials Research Bulletin,* 102 (2018) 70-78;

25. Corneliu Hamciuc, Elena Hamciuc, Daniela Rusu, **Mihai Asandulesa,** Aleksandra Wolinska-Grabczyk, Thermal, Electrical, and Gas Transport Properties of New Aromatic Poly(Ether Ether Ketone)/Silica Hybrid Films, *Polymer Composites,* 39 (2018) E1544-E1553;

26. Giovanna Canu, Giorgia Confalonieri, Marco Deluca, Lavinia Curecheriu, Maria Teresa Buscaglia, **Mihai Asandulesa,** Nadejda Horchidan, Monica Dapiaggi, Liliana Mitoseriu, Vincenzo Buscaglia, Structure-property correlations and origin of relaxor behaviour in BaCexTi(1-x)O(3), *Acta Materialia,* 152 (2018) 258-268;

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F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

1. Proiect de mobilitati PN-III-P1-1.1-MC-2019-0861 (Măsurători de spectroscopie dielectrică a polimerilor conjugați obținuți sub formă de filme subțiri)
2. Proiect tinere echipe PN-III-P1-1.1-TE-2021 (Noi concepte de nanocompozite semiconductoare pe baza de polimeri conjugati si nanoparticule multifunctionale Janus [POLYSEM])
3. Proiect de mobilitati PN-IV-P2-2.2-MC-2024-0729 (Măsurători de spectroscopie dielectrică ale materialelor eterogene)

L. Premii, distincţii

1. Premiul "Organizing Committee Prize" pentru lucrarea: Dielectric spectroscopy investigation of new polyimides and copolyimides based on triphenylmethane diamines, 12th International Conference on Physics of Advanced Materials, 22 – 28 septembrie 2018 – Heraklion, Crete, Greece
2. Premiul I acordat pentru lucrarea: Plasma polymerization method to obtain hydrophilic/hydrophobic coatings, PhD Students Workshop on Fundamental and Applied Research in Physics, 24 octombrie 2009, Iasi, Romania

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Guest Editor la revista Polymers (Impact Factor: 4.7, Q1) pentru numarul special "Polymer-Based Dielectric Materials"

Data: 6 octombrie 2025

Dr. Asăndulesă Mihai-Gabriel

A.3.3.c - Lista de lucrări

Numele și prenumele: Burlacu Bogdan

A. Teza de doctorat

A1. Bogdan Burlacu, *Tracing of Evolutionary Search Trajectories in Complex Hypothesis Spaces*, Universitatea Johannes Kepler Linz, 2017
https://epub.jku.at/obvulihs/content/titleinfo/2246376

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

B1. G. Kronberger, B. Burlacu, B. Kommenda, S. M. Winkler, M. Affenzeller, *Symbolic Regression*, CRC Press, 2024
https://doi.org/10.1201/9781315166407

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

G. Lucrări ştiinţifice publicate în reviste din străinătate

G1. C Crary, G Stitt, B Burlacu, W Banzhaf, *It's Time to Revisit the Use of FPGAs for Genetic Programming*, Genetic Programming Theory and Practice XXI, 2025, ISBN 978-981-96-0076-2

G2. E Mayrhuber, B Burlacu, SM Winkler, *How to Measure Explainability and Interpretability of Machine Learning Results*, Genetic Programming Theory and Practice XXI, 2025, ISBN 978-981-96-0076-2

G3. C. Haider, F.O. de Franca, B. Burlacu, F. Bachinger, G. Kronberger, M. Affenzeller, *Shape-constrained Symbolic Regression: Real-World Applications in Magnetization, Extrusion and Data Validation*, Genetic Programming Theory and Practice XX, 2024, ISBN 978-981-99-8412-1

G4. B. Burlacu, M. Kommenda, G. Kronberger, S.M. Winkler, M. Affenzeller, Symbolic Regression in Materials Science: Discovering Interatomic Potentials

from Data, Genetic Programming Theory and Practice XIX, 2023, ISBN 978-981-19-8460-0

G5. L. Kammerer, G. Kronberger, B. Burlacu, S.M. Winkler, M. Kommenda, M. Affenzeller, -*Symbolic Regression by Exhaustive Search: Reducing the Search Space using Syntactical Constraints and Efficient Semantic Structure Deduplication*, Genetic Programming Theory and Practice XVII, 2020, ISBN 978-3-030-39957-3, Editura Springer

G6. G. Krongerger, L. Kammerer, B. Burlacu, S.M. Winkler, M. Kommenda, M. Affenzeller, *Cluster Analysis of a Symbolic Regression Search Space*, Genetic Programming Theory and Practice XVI, 2019, ISBN 978-3-030-04734-4, Editura Springer

G7. B. Burlacu, M. Affenzeller, M. Kommenda, G. Kronberger, S.M. Winkler, *Schema Analysis in Tree-based Genetic Programming*, Genetic Programming Theory and Practice XV, 2018, ISBN 978-3-319-90511-2, Editura Springer

G8. S.M. Winkler, M. Affenzeller, B. Burlacu, G. Kronberger, M. Kommenda, P. Fleck, *Similarity-based Analysis of Population Dynamics in Genetic Programming Performing Symbolic Regression*, Genetic Programming Theory and Practice XIV, 2017, ISBN978-3-319-97087-5, Editura Springer

G9. M. Kommenda, G. Kronberger, M. Affenzeller, S.M. Winkler, B. Burlacu, *Evolving Simple Symbolic Regression Models by Multi-objective Genetic Programming*, Genetic Programming Theory and Practice XIII, 2016, ISBN 978-3-319-34221-4, Editura Springer

G10. M. Kommenda, M. Affenzeller, G. Kronberger, B. Burlacu, S.M. Winkler, *Multi-Population Genetic Programming with Data Migration for Symbolic Regression*, Computational Intelligence and Efficiency in Engineering Systems, 2015, ISBN 1860-949X, Editura Springer

G11. S. M. Winkler, M. Affenzeller, G. Kronberger, M. Kommenda, B. Burlacu, S. Wagner, *Sliding Window Symbolic Regression for Detecting Changes of System Dynamics*, Genetic Programming Theory and Practice XII, 2015, ISBN 978-3-319-16029-0, Editura Springer

G12. M. Affenzeller, S.M. Winkler, G. Kronberger, M. Kommenda, B. Burlacu, S. Wagner, *Gaining Deeper Insights in Symbolic Regression*, Genetic Programming Theory and Practice XI, 2014, ISBN 978-1-4939-0374-0, Editura Springer

G13. Bogdan Burlacu, *Zobrist Hash-based Duplicate Detection in Symbolic Regression*, Philosophical Transactions A, 2025 (accepted for publication)

G14. Guilherme Seidyo Imai Aldeia, Hengzhe Zhang, Geoffrey Bomarito, Miles Cranmer, Alcides Fonseca, Bogdan Burlacu, William G La Cava, Fabrício Olivetti de França, *Call for Action: towards the next generation of symbolic regression benchmark*, Proceedings of the Genetic and Evolutionary Computation Conference Companion, 2025, DOI: 10.1145/3712255.3734309

G15. D. Bartlett, L. Kammerer, G. Kronberger, H. Desmond, P. Ferreira, B. D. Wandelt, B. Burlacu, D. Alonso, M. Zennaro, *A precise symbolic emulator of the linear matter power spectrum*, Astronomy & Astrophysics, Vol. 686, 2024, DOI: 10.1051/0004-6361/202348811

G16. C. Crary, W. Piard, G. Stitt, B. Hicks, C. Bean, B. Burlacu, W. Banzhaf, *Using FPGA Devices to Accelerate the Evaluation Phase of Tree-Based Genetic Programming: An Extended Analysis*, 2024, Genetic Programming and Evolvable Machines,

G17. B. Burlacu, K. Yang, M. Affenzeller, *Population Diversity and Inheritance in Genetic Programming for Symbolic Regression*, Natural Computing, Vol. 23, Pag. 531-566, 2024, DOI:10.1007/s11047-022-09934-x

G18. C. Haider, F.O. de Franca, B. Burlacu, G. Kronberger, *Shape-Constrained Multi-Objective Genetic Programming for Symbolic Regression*, Applied Soft Computing, Vol. 132, 2023, DOI:10.1016/j.asoc.2022.109855

G19. G. Kronberger, F.O. de Franca, B. Burlacu, C. Haider, M. Kommenda, *Shape-constrained Symbolic Regression - Improving Extrapolation with Prior Knowledge*, Evolutionary Computation, Vol. 30, Issue 1, 2022, DOI: 10.1162/evco_a_00294

G20. M. Kommenda, B. Burlacu, G. Kronberger, M. Affenzeller, *Parameter Identification for Symbolic Regression using Nonlinear Least Squares*, Genetic Programming and Evolvable Machines, Vol. 21, 2020, DOI: 10.1007/s10710-019-09371-3

G21. B. Burlacu, M. Affenzeller, S.M. Winkler, M. Kommenda, G. Kronberger, *Methods for Genealogy and Building Block Analysis in Genetic Programming*, Studies in Computational Intelligence, Vol. 585, 2015, DOI: 10.1007/978-3-319-15720-7_5

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I1. B. Burlacu, *Backend-Agnostic Tree Evaluation for Genetic Programming*, Genetic and Evolutionary Computation Conference Companion, Pag. 1649-1657, 2024, DOI: 10.1145/3638530.3664161

I2. E. Russeil, F.O. de França, K. Malanchev, B. Burlacu, E. Ishida, M. Leroux, C. Michelin, G. Moinard, E. Gangler, *Multiview Symbolic Regression*, Proceedings of the Genetic and Evolutionary Computation Conference, Pag. 961-970, 2024, DOI: 10.1145/3638529.3654087

I3. C. Crary, B. Burlacu, W. Banzhaf, *Enhancing the Computational Efficiency of Genetic Programming Through Alternative Floating-Point Primitives*, Parallel Problem Solving from Nature, Vol. 15148, pag. 322-339, 2024, DOI: 10.1007/978-3-031-70055-2_20

I4. B. Burlacu, *GECCO'2022 Symbolic Regression Competition: Post-analysis of the Operon Framework*, Genetic and Evolutionary Computation Conference Companion, Pag. 2412-2419, 2023, DOI: 10.1145/3583133.3596390

I5. C. Haider, F.O. de Franca, G. Kronberger, B. Burlacu, *Comparing optimistic and pessimistic constraint evaluation in shape-constrained symbolic regression*, Genetic and Evolutionary Computation Conference Companion, Pag. 938-945, 2022, DOI: 10.1145/3512290.3528714

I6. W. La Cava, B. Burlacu, M. Virgolin, M. Kommenda, P. Orzechowski, F. O. de Franca, Y. Jin, J. H. Moore, *Contemporary Symbolic Regression Methods and Their Relative Performance*, Advances in Neural Information Processing Systems, 2021

I7. B. Burlacu, G. Kronberger, M. Kommenda, *Operon C++: An Efficient Genetic Programming Framework for Symbolic Regression*, 2020, Genetic and

Evolutionary Computation Conference Companion, Pag. 1562-1570, DOI: 10.1145/3377929.3398099

I8. B. Burlacu, M. Affenzeller, G. Kronberger, M. Kommenda, *Online Diversity Control in Symbolic Regression via a Fast Hash-based Tree Similarity Measure*, 2019, IEEE Congress on Evolutionary Computation, Pag. 2175-2182, DOI: 10.1109/CEC.2019.8790162

I9. B. Burlacu, L. Kammerer, M. Affenzeller, G. Kronberger, *Hash-based Tree Similarity and Simplification in Genetic Programming for Symbolic Regression*, Computer Aided Systems Theory EuroCAST 2019, Pag. 361-319, 2019, DOI: 10.1007/978-3-030-45093-9_44

I10. M. Affenzeller, B. Burlacu, S. M. Winkler, M. Kommenda, G. Kronberger, S. Wagner, *Offspring selection genetic algorithm revisited: improvements in efficiency by early stopping criteria in the evaluation of unsuccessful individuals*, Computer Aided Systems Theory Eurocast 2017, Pag. 424-431, 2018, DOI: 10.1007/978-3-319-74718-7_51

I11. B. Burlacu, M. Affenzeller, *Schema-based Diversification in Genetic Programming*, Proceedings of the Genetic and Evolutionary Computation Conference, Pag. 1111-1118, 2018, DOI: 10.1145/3205455.3205594

I12. G. Kronberger, B. Burlacu, M. Kommenda, S. W. Winkler, M. Affenzeller, *Measures for the Evaluation and Comparison of Graphical Model Structures*, Computer Aided Systems Theory Eurocast 2017, Pag. 283-290, 2017, DOI: 10.1007/978-3-319-74718-7_34

I13. M. Kommenda, J. Karder, A. Beham, B. Burlacu, G. Kronberger, S. Wagner, M. Affenzeller, *Optimization Networks for Integrated Machine Learning*, Computer Aided Systems Theory Eurocast 2017, Pag. 392-399, 2017, DOI: 10.1007/978-3-319-74718-7_47

I14. M. Affenzeller, S. M. Winkler, B. Burlacu, G. Kronberger, M. Kommenda, S. Wagner, *Dynamic Observation of Genotypic and Phenotypic Diversity for Different Symbolic Regression GP Variants*, Genetic and Evolutionary Computation Conference Companion, Pag. 1553-1558, 2017, DOI: 10.1145/3067695.3082530

I15. M. Kommenda, B. Burlacu, R. Holecek, A. Gebeshuber, M. Affenzeller, *Heat Treatment Process Parameter Estimation using Heuristic Optimization Algorithms*,

Proceedings of the 27th European Modeling and Simulation Simposium, Pag. 222-228, 2015

I16. B. Burlacu, M. Kommenda, M. Affenzeller, *Building Blocks Identification Based on Subtree Sample Counts for Genetic Programming*, 2015, Asia-Pacific Conference on Computer Aided Systems Engineering, Pag. 152-157, DOI: 10.1109/APCASE.2015.34

I17. B. Burlacu, M. Affenzeller, M. Kommenda, *On the Effectiveness of Genetic Operations in Symbolic Regression*, Computer Aided Systems Theory Eurocast 2015, Pag. 367-374, 2015, DOI: 10.1007/978-3-319-27340-2_46

I18. B. Burlacu, M. Affenzeller, M. Kommenda, *On the Evolutionary Behavior of Genetic Programming with Constants Optimization*, Computer Aided Systems Theory Eurocast 2013, Pag. 284-291, 2013, DOI: 10.1007/978-3-642-53856-8_36

I19. B. Burlacu, M. Affenzeller, M. Kommenda, S.M. Winkler, G. Kronberger, *Visualization of genetic lineages and inheritance information in genetic programming*, 2013, Genetic and Evolutionary C omputation Conference Companion, Pag. 1351-1358, DOI: 10.1145/2464576.2482714

I20. A. Scheibenpflug, S. Wagner, E. Pitzer, B. Burlacu, M. Affenzeller, *On the Analysis, Classification and Prediction of Metaheuristic Algorithm Behavior for Combinatorial Optimization Problems*, 24th European Modeling and Simulation Symposium, Pag. 368-372, 2012

I21. L. Ferariu, B. Burlacu, *Multiobjective Graph Genetic Programming with Encapsulation Applied to Neural System Identification*, 15th International Conference on System Theory, Control and Computing, 2011, ISBN: 978-1-4577-1173-2

I22. L. Ferariu, B. Burlacu, *Multiobjective Design of Evolutionary Hybrid Neural Networks*, 17th International Conference on Automation and Computing, Pag. 195-200, 2011, ISBN 978-1-4673-0000-1

I23. L. Ferariu, B. Burlacu, *Multiobjective Genetic Programming with Adaptive Clustering*, 7th International Conference on Intelligent Computer Communication and Processing, Pag. 27-32, 2011, DOI: 10.1109/ICCP.2011.6047840

I24. L. Ferariu, B. Burlacu, *Graph Genetic Programming for Hybrid Neural Networks Design*, International Joint Conference on Computational Cybernetics and Technical Informatics, Pag. 547-552, 2010, DOI: 10.1109/ICCCYB.2010.5491213

Data,
26.09.2025

Lista de lucrări în domeniul de studii universitare de licență
Automatică și Informatică Aplicată și Sisteme Inteligente/ Ingineria sistemelor

Numele şi prenumele: Păucă Ovidiu

A. **Teza de doctorat.**

1. **Păucă O.**, *Cooperarea vehiculelor automate prin intermediul rețelelor de comunicații / Cooperating automated vehicles through communication networks*, 154 pg, 2024, Universitatea Tehnică "Gheorghe Asachi" din Iași, România, domeniul Ingineria sistemelor, conducător de doctorat prof.dr.ing. Căruntu Constatntin-Florin.

B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**

C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).**

1. Maxim A., **Păucă O.**, Lazăr C, *Ingineria Reglării Automate – Îndrumar de laborator*, Ed. MatrixRom, București, 2024, ISBN 978-606-25-0935-4, 74 pagini.

D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.**

E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.**

1. Ingineria reglării automate – Laborator 2024-2025

F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.**

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **O. Pauca**, A. Maxim and C. F. Caruntu, "Control Architecture for Cooperative Autonomous Vehicles Driving in Platoons at Highway Speeds," in IEEE Access, vol. 9, pp. 153472-153490, 2021 (Q2, IF=3.9).
2. **O. Pauca.**, A. Maxim and C. F. Caruntu, "Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework", Sensors, 21, 3968, 2021 (Q2, IF=3.9).
3. R. G Lazar, **O. Pauca**, A. Maxim, C. F. Caruntu, "Control Architecture for Connected Vehicle Platoons: From Sensor Data to Controller Design Using Vehicle-to-Everything Communication," Sensors 23, no. 17: 7576, 2023 (Q2, IF=3.9).
4. **O. Pauca**, M. Lazar and C. F. Caruntu, "Hybrid Cost Function Distributed MPC for Vehicle Platoons With Stability and String Stability Properties," in IEEE Control Systems Letters, vol. 7, pp. 2257-2262, 2023, presented at 62nd IEEE Conference on Decision and Control (CDC), Singapore, 2023 (Q2, IF=3).

5. A. Maxim, **O. Pauca** and C. F. Caruntu, "Coalitional Distributed Model Predictive Control Strategy with Switching Topologies for Multi-Agent Systems", Electronics 13, no. 4: 792, 2024 (Q2, IF=2.9).
6. A. Maxim, **O Pauca**, RG Amariei, F. C. Braescu, C. F. Caruntu, "Coalitional Control Strategy for a Heterogeneous Platoon Application", Mathematics 12, no. 1: 7, 2024 (Q1, IF=2.4).
7. A. Maxim, **O. Pauca** and C. F. Caruntu, "Distributed Model Predictive Control and Coalitional Control Strategies—Comparative Performance Analysis Using an Eight-Tank Process Case Study", Actuators 12, no. 7: 281, 2023 (Q2, IF=2.6).

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. **Lucrări ştiinţifice publicate în reviste din străinătate.**

H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.**

1. Maxim A., **Pauca O.**, Caruntu C.F., *Coalitional Control Algorithm For A Vehicle Platooning Application – A Selfish Approach*, Buletinul Institutului Politehnic Iasi, 69 (73), pp. 39–65, 2023. (indexată ZMATH).
2. **Pauca O**, Caruntu C. F., Maxim A., Lazar C., *Control architecture for automated Vehicles to ensure obstacle avoidance*, Buletinul Institutului Politehnic Iasi, 66 (70), pp. 71–83, 2020. (indexată ZMATH).

I. **Lucrări ştiinţifice publicate în volumele conferinţelor.**

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. **O. Pauca**, A. Maxim and C. F. Caruntu, "Vehicle Trajectory Planning for Collision Avoidance with Mobile Obstacles," 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, p.607-612, 2022.
2. **O. Pauca**, A. Maxim and C. F. Caruntu, "'DMPC-based Data-packet Dropout Compensation in Vehicle Platooning Applications using V2V Communications, " European Control Conference (ECC), Delft, Netherlands, pp. 2639-2644, 2021.
3. **O. Pauca**, A. Maxim and C. F. Caruntu, "Trajectory Planner based on Thirdorder Polynomials applied for Platoon Merging and Splitting," 29th Mediterranean Conference on Control and Automation (MED), Puglia, Italy, pp.83-88, 2021.
4. **O. Pauca**, A. Maxim and C. F. Caruntu, "Cooperative Platoons Merging for Obstacle Avoidance on Highways," 25th International Conference on System Theory, Control and Computing (ICSTCC), Iasi, Romania, pp. 25-30, 2021.
5. **O. Pauca**, C. F. Caruntu and A. Maxim, "Trajectory Planning and Tracking for Cooperative Automated Vehicles in a Platoon," 24th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2020, pp. 769-774.

6. A. Maxim, **O. Pauca**, C. F. Caruntu and C. Lazar, "Distributed Model Predictive Control Algorithm with Time-Varying Communication Delays for a CACC Vehicle Platoon," 24th International Conference on System Theory Control and Computing (ICSTCC), Sinaia, Romania, pp. 775-780, 2020.
7. **O. Pauca**, C. F. Caruntu and C. Lazar, "Predictive Control for the Lateral and Longitudinal Dynamics in Automated Vehicles," 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 797-802, 2019.
8. **O. Pauca** and C. F. Caruntu, "Travel Time Minimization at Roundabouts for Connected and Automated Vehicles," 25th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Vienna, Austria, pp. 905-910, 2020.
9. **O. Pauca**, A. Maxim, J.M. Maestre, C. F. Caruntu, "Bio-inspired control by overlapping adaptive clusters: a vehicle platoon case study", IFAC-Papers-OnLine, 56(2), 2023, Pages 1460–1465, presented at 22nd IFAC World Congress, Yokohama, Japan, 2023.
10. A. Maxim, **O. Pauca** and C. F. Caruntu, "Assessment of Control Efficiency in a Vehicle Platooning Application," European Control Conference (ECC), Bucharest, Romania, pp. 1-6, 2023 (ISI Proceedings).
11. **O. Pauca**, A. Maxim and C. F. Caruntu, "Communication topologies evaluation for a vehicle merging into a platoon on highway", 30th Mediterranean Conference on Control and Automation (MED), Vouliagmeni, Greece, pp. 957-962, 2022 (ISI Proceedings).
12. A. Maxim, **O. Pauca**, J. M. Maestre and C. F. Caruntu, "Assessment of computation methods for coalitional feedback controllers", European Control Conference (ECC), London, United Kingdom, pp. 1472-1477, 2022 (ISI Proceedings).
13. C. F. Caruntu, C. M. Pascal, A. Maxim, **O. Pauca**, "Bio-inspired Coordination and Control of Autonomous Vehicles in Future Manufacturing and Goods Transportation", IFAC-Papers-OnLine, 52(2), 2020, Pages 10861-10866, presented at 21th IFAC World Congress, Germany, 2020 (ISI Pro-ceedings).

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. **O. Pauca,** M. Lazar and C. F. Caruntu, "Cooperative adaptive cruise control with string stability based on DMPC for vehicle platooning," 27th International Conference on System Theory, Control and Computing (ICSTCC), Timisoara, Romania, pp. 374-379, 2023.
2. C. F. Caruntu, V. Varga and **O. Pauca**, "TrueTime-based Analysis of the Communication Networks used in Vehicle Control Structures," 21th International Carpathian Control Conference (ICCC), High Tatras, Slovakia, pp.1-6, 2020.

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi.

1. **Membru** în echipa de cercetare numărul 5, în proiectul cu titlul "*Controlul Coaliţional Distribuit pentru Sisteme Multi-Agent* (CoDiSMA)", finanțat în cadrul proiectului COMPETE 2.0 nr.27PFE/2021 finanțat de Guvernul României, Ministerul Cercetării, Inovării și Digitalizării, 01/08/2022-31/10/2023, valoare 137000 RON.
2. **Membru** în proiectul de cercetare cu titlul *"Mediu colaborativ pentru dezvoltarea arhitecturilor cloud bazate pe OpenStack cu aplicații în CDI*", avand codul SMIS: 124998, , valoarea 2023: 3.720.443,26 RON, Manager proiect prof. dr. ing. mat. Daniel Condurache.
3. **Membru** în proiectul de cercetare cu titlul *"Controlul optimizat al grupurelor de vehicule automate cooperative* (INTEROPERATE)", nr. TE 190/2021, 01/2021-12/2022, finanțat în competiția națională în programul PN III Resurse Umane, subprogramul Proiecte de cercetare pentru stimularea tinerelor echipe independente, al Unității Executive pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI), 01/2021-12/2022, valoare 520640 RON. director: Conf. dr. ing. Constantin – Florin Căruntu.

L. Premii, distincţii.

1. Articolul cu titlul *"Multivariable Optimisation for Waiting-Time Minimisation at Roundabout Intersections in a Cyber-Physical Framework"* (autori **Pauca O.**, Maxim A., Caruntu C.F.), publicat în Sensors, a fost premiat în 2021 de Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI) în programul Premierea rezultatelor cercetării, revista fiind clasificată ca Q1 (în zona roșie).

M. Alte realizări semnificative.

Data: 29/09/2025

Grad didactic, Titlu științific, Numele și prenumele: Asist. dr. ing. PĂUCĂ Ovidiu
Semnătura:

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: **Răzvan-Gabriel Lazăr**

A. Teza de doctorat.

T1. **R. G. Lazăr**, P*erformance assessment of networked communications for interconnected vehicles*, 187 pg, 2024, domeniul Ingineria sistemelor, conducător de doctorat: Prof.dr.ing. Căruntu Constantin-Florin.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F1. O. Pauca, . **R. G. Lazar**, M. Postolache, C. F. Caruntu, DMPC-based control solution for mobile robots platoon based on ZigBee communication, Computers and Electrical Engineering, Volume 120, Part B, 2024.

F2. . **R. G. Lazar**; Pauca, O.; Maxim, A.; Caruntu, C.-F. Control Architecture for Connected Vehicle Platoons: From Sensor Data to Controller Design Using Vehicle-to-Everything Communication. Sensors 2023, 23(17), 7576.

F3. R. G. Lazar, A. -V. Militaru, C. -F. Caruntu, C. Pascal and C. Patachia-Sultanoiu, Real-Time Data Measurement Methodology to Evaluate the 5G Network Performance Indicators, in IEEE Access, vol. 11, pp. 43909-43924, 2023.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

H1. **R. G. Lazar**, C. F Caruntu, Comparative analysis between 4G LTE and 5G NR: An evaluation of cellular communications for V2X technology, Bulletin of the Polytechnic Institute of Iasi. Electrical Engineering, Power Engineering, Electronics Section, vol. 69, no. 1, 2023, pp. 9-22.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I1. O. Pauca, **R. G. Lazar**, A. Maxim and C. -F. Caruntu, Coalitional Control for Mobile Robots Formation in Logistic Applications, 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2024, pp. 451-456.

I2. A. Maxim, O. Pauca, **R. -G. Lazar**, C. -M. Amarandei and C. -F. Caruntu, Cloud-Based DMPC Simulation for Autonomous Mobile Robot Platooning, 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2024, pp. 32-37.

I3. A. V. Militaru, **R. G. Lazar**, C. Pascal, C. R. Comsa, I. Bogdan and C. F. Caruntu, Validation of Real-world Measurements Through Ray Tracing Simulation for 5G Urban Scenarios, International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Romania, 2024, pp. 1-4

I4. R.-G. Lazar, A. -V. Militaru and C.-F. Caruntu, Impact of Data Packet Loss for DSRC Vehicular Safety Communication in Connected Vehicle Platoons, IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA), Sinaia, Romania, 2023, pp. 1-4.
I5. R. -G. Lazar and C. -F. Caruntu, Evaluation of Channel Congestion for V2V Safety Communication in Multiplatooning Applications, International Symposium ELMAR, Zadar, Croatia, 2023, pp. 133-136.
I6. R. G. Lazar, A. V. Militaru, C. F. Caruntu and C. Patachia–Sultanoiu, Performance analysis of 5G communication based on distance evaluation using the SIM8200EA-M2 module, 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2022, pp. 37-42.
I7. A. V. Militaru, **R. G. Lazar**, C. F. Caruntu, C. R. Comsa and I. Bogdan, Analysis of message flow transmissions for an inter-vehicle communication scenario, 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2022, pp. 1-6.
I8. R. G. Lazar, C. F. Caruntu and C. Patachia-Sultanoiu, Simulated and practical approach to assess the reliability of the 5G communications for the Uu interface, 2022 14th International Conference on Communications (COMM), Bucharest, Romania, 2022, pp. 1-6.
I9. R. G. Lazar, V. Varga and C. F. Caruntu, TrueTime-based Analysis of a Distributed Generalized Predictive Control Architecture for CACC Systems, 25th International Conference on System Theory, Control and Computing (ICSTCC), Iasi, Romania, 2021, pp. 612-617.
I10. C. F. Caruntu, V. Varga and **R. G. Lazar**, TrueTime Testing of Inter-Vehicular Communications for Cooperative Vehicles using Distributed Generalized Predictive Control, 29th Mediterranean Conference on Control and Automation (MED), PUGLIA, Italy, 2021, pp. 77-82.
I11. R. G. Lazar and C. F. Caruntu, Simulator for the Automotive Diagnosis System on CAN using Vector CANoe Environment, 24th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2020, pp. 705-710.

J. Inventii.

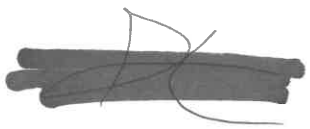
K. Contracte de cercetare/granturi.

L. Premii, distincţii.

L1. Premiul pentru studentul doctorand cu cele mai bune performanțe în cercetare științifică in anul 2024.

M. Alte realizări semnificative.

Data: 29/09/2025



Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Gabor Georgel

A. Teza de doctorat.

"Contribuţii privind îmbunătăţirea comunicaţiilor industriale între diferite echipamente ale unui sistem electric"

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

Dosoftei C.C., **Gabor G.** (2024), Îndrumar de laborator - Sisteme distribuite de achiziție, monitorizare și conducere, 270 pg, ISBN 978-973-621-546-9, Editura Universităţii Tehnice "Gheorghe Asachi" din Iaşi 2024

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. **Georgel Gabor**, Adrian Traian Plesca, "The PLC control of electrical system consisting in electromagnetically sliding brake and coupling", Journal of Energy Technology, JET Volume 8 (2015), p.p. 1 - 10 2018, indexată database INSPEC.

2. **G. Gabor**, G. Pintilie, C. Dumitrescu,C. Nituca, A. T. Plesca, "Application of Industrial PROFIBUS-DP protocol, International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, indexată IEEExplore.

3. **Georgel Gabor**, Georgian-Cosmin Pintilie , Adrian Traian Plesca, Maricel Cardasim, "Temperature monitoring system using an infrared temperature sensor connected to a PLC", 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS – SIELMEN, 2019, indexată IEEExplore.

4. **Georgel Gabor**, Florin-Andrei Rusu , Adrian Traian Plesca, Costica Nituca, "Analysis of sliding electromagnetic coupling parameters in a PLC automation system", 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS – SIELMEN, 2019, indexată IEEExplore.

5. Florinel Lupoiu, Adrian Traian Plesca, **Georgel Gabor**, "New Solution for Cereals, Vegetables and Fruits Storage", 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS – SIELMEN, 2019, indexată IEEExplore.

6. Georgian-Cosmin Pintilie, Adrian Traian Plesca, Florin-Andrei Rusu ,**Georgel Gabor**, "New Materials for Heating Systems", 12th INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTROMECHANICAL AND ENERGY SYSTEMS – SIELMEN, 2019, indexată IEEExplore.

7. Dorin-Dumitru Lucache ,**Georgel Gabor**, Constantin-Catalin Dosoftei, "Integrated Learning in Electrical and Control Engineering Using an Educational Elevator System", International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, , indexată IEEExplore.

8. Petru Valentin Roşu, Adrian-Traian Plesca ,**Georgel Gabor**, Gabriel Chiriac, "Optimizing the Operation of Photovoltaic Panel Systems", International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, , indexată IEEExplore.

9. Gabriel Mocanu, Adrian-Traian Plesca ,**Georgel Gabor**, Maricel Adam, Mihai Andrusca, "Temperature Monitoring of the Heating Resistors of the Railway Switches from Romanian Railway System", International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, indexată IEEExplore.

10. Florinel Lupoiu, Adrian-Traian Plesca ,**Georgel Gabor**, Gabriel Chiriac, "A New Solution of Electronic Device Proposed for Cereals, Vegetables and Fruits Storage", International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, indexatăIEEExplore.

11 . Niţucă, C., CHIRIAC, **G., Gabor**, G., Nucă, I., Cazac, V., & Burduniuc, M. (2021). GEOMETRY DESIGN AND ANALYSIS OF AN ELECTRIC BUS FOR THE INTERIOR

THER-MAL MODELLING. Journal of Energy Technology, 14(2), 47-55, indexată database INSPEC

12. G. CHIRIAC, D. -D. Lucache, C. Nițucă and **G. Gabor**, "Aspects Regarding the Heating of Electric Buses," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 481-486, doi: 10.1109/SIELMEN53755.2021.9600435, indexată IEEE explore.

13. G. CHIRIAC, D. -D. Lucache, C. Nițucă and **G. Gabor**, "Aspects Regarding the Heating of Electric Buses," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 481-486, doi: 10.1109/SIELMEN53755.2021.9600435, indexată IEEE explore.

14. **Georgel Gabor**, Gheorghe Livinț, "Solution for Monitoring and Remote Control Based on Modbus RTU and S7-1200 PLC", 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, indexată IEEExplore.

15. **Georgel Gabor**, Gheorghe Livinț, "Application of S7-1200 PLC for Temperature Monitoring of a Railway Separator", 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, indexată IEEExplore.

I.3.2. Lucrări ştiințifice publicate în volumele unor conferințe naționale

1. **Georgel Gabor**, Gheorghe Livinț," Solution for pumps control in irrigations system using S7-1200 PLC", Conferința Națională de Acționări Electrice, Timișoara, 2022, indexata NNALS of Faculty Engineering Hunedoara – International Journal of Engineering, Tome XX [2022] | Fascicule 3 [August], indexată Index Copernicus

J. Invenții.

K. Contracte de cercetare/granturi

1. Improving the cross-border public transportation using electric buses supplied with renewable energy – ELBUS, 2SOFT/3.1/54, European Neighbourhood Instrument (ENI), Cross Border Cooperation (CBC) from Joint Operational Programme Romania – Republic of Moldova, Priority 3.1 – Development of cross-border transport infrastructure and ICT infrastructure. Perioada de implementare: 2020 – 2023.**Membru proiect**

2. New concept on energy efficiency heating system for the passenger thermal comfort in the electric buses, 2021. **Membru proiect**

2.The experimental study on overload current arc characteristics of DC electric fuse - DCFUSE, PN-III-P3-3.1-PM-RO-CN-2018-0060, România-China, „Gheorghe Asachi" Technical University of Iasi - Xi'an Jiaotong University. Perioada de implementare 2018-2019. **Membru proiect**

Data: 1 octombrie 2025

asist. dr.ing. Gabor Georgel

A.3.3.c. Lista de lucrari

Numele și prenumele: Mihalache George

A. Teza de doctorat.

Cercetări privind îmbunătățirea metodelor de comandă și control ale motoarelor electrice pas cu pas, conducător Prof. Dr. Ing. Livinț Gheorghe, Noiembrie 2018.

B. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS.

D. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări științifice publicate în reviste cotate ISI sau indexate în baze de date internaționale.

G. Lucrări științifice publicate în reviste din străinătate.

H. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS.

George Mihalache, Gheorghe Livinț, Florin Cătălin Brăescu, Costel Donose, Implementation of command sequences of hybrid stepper motor with DSPICDEM MCSM board, Buletinul Institutului Politehnic din Iași, Vol. 64(68), Nr. 2, 2018, secția Electrotehnică, Energetică, Electronică, pp 95-101.

I. Lucrări științifice publicate în volumele conferințelor.

I1 Lucrări indexate ISI

Mihalache George, Ioan Aleodor-Daniel, FPGA Implementation of BLDC Motor Driver with Hall Sensor Feedback, 2018 INTERNATIONAL CONFERENCE AND EXPOSITION ON ELECTRICAL AND POWER ENGINEERING (EPE), pp 624-629.

Mihalache George, Livint Gheorghe, Horga Vasile, Arcire Alexandru, A New Mathematical Model for the Command Sequence Generator of a Two-Phase Hybrid Stepper Motor, 2016 INTERNATIONAL CONFERENCE AND EXPOSITION ON ELECTRICAL AND POWER ENGINEERING (EPE), pp 640-643.

Arcire Alexandru, **Mihalache George**, Position Control of a Bidirectional Moving Magnet Actuator Based on Contact less Hall-Effect Transducer, 2015 9TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), pp 417-421.

Mihalache George, Zbant (Adam) Andreea, Livint Gheorghe, 2013 8TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), DOI10.1109/ATEE.2013.6563389.

J. Invenții.

K. Contracte de cercetare.

L. Premii, distincții.

M. Alte realizări semnificative.

Data 03.10.2025

Anexa II.09.b – Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență
Ingineria sistemelor

Numele și prenumele: **Mădălina-Maria Brezuleanu**

A. Teza de doctorat:

- **M.M. Brezuleanu,** *Relația libertate economică- bunăstare individuală*, domeniul Economie, **Universitatea „Al. I. Cuza" Iași, Facultatea de Economie și Administrarea Afacerilor Iași, 2024**

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS):

- **RELAȚIA LIBERTATE ECONOMICĂ-BUNĂSTARE INDIVIDUALĂ- Mădălina-Maria BREZULEANU,** Editura Performantica, Iași 2024, ISBN 978-630-328-099-8, 236 pag.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale:

- DETERMINANTS OF SUBJECTIVE WELL-BEING AMONG EUROPEAN UNION`S OLDER ADULTS, autori: Alexandra Cristina Sîrbu, Mădălina Brezuleanu, Claudiu Tiganaș, Mircea Asandului, Andreea Iacobuță, revista TRANSFORMATIONS IN BUSINESS & ECONOMICS, vol.21, nr. 2A (21A), 2022, Factor de impact = 1,824, Scor de influență = 0,161, WOS: 000927592100015, pag. 671-689, ISSN: 1648-4460
- ADAPTATION OF ENTREPRENEURIAL EDUCATION AND TRAINING IN ECONOMICS FOR THE STUDENTS OF „ ION IONESCU DE LA BRAD" UNERSITY OF LIFE SCIENCE (IULS) IAȘI, ROMANIA, IN THE CONTEXT OF CHARGING LABOR MARKET NEEDS, Carmen-Olguța Brezuleanu, Roxana Mihalache, Mădălina-Maria Brezuleanu, Elena Ungureanu, Alina Sirghea, SCIENTIFIC PAPER-SERIES MANAGEMENT ECONOMIC ENGINERING IN AGRICULTURE AND RURAL

DEVELOPMENT,VOL.24, Issue 1, 2024, pag. 135-146, Factor de impact = 1,4, ISSN 2284-7995, E-ISSN 2285-3952.

- EFFECTS OF ECONOMIC FREEDOM ON SUBJECTIVE-WELL-BEING" Alexandra Cristina Sîrbu, Andreea Iacobuță, Mircea Asandului, Mădălina-Maria Brezuleanu, 2023, SCIENTIFIC ANNALS OF ECONOMICS AND BUSINESS, VOL 70, Special Issue SI, page 85-97, WOS:000992422300006
- QUALITATIVE ANALYSIS OF INNOVATIVE ENTREPRENEURSHIP IN VARIOUS FORMS OF CAPITALISM, Mădălina-Maria BREZULEANU, publicat în Proccedings The 19th Romanian Textiles and Leather Conference, Iași, pg. 353-360, DOI: https://doi.org/10.2478/9788367405829-051

G. Lucrări în reviste indexate BDI:

A. Lucrări ştiinţifice publicate în reviste din străinătate.

B. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS (sau CNCS).

- ROMANIA UNDER THE EFFECTS OF THE TRANSITION OF THE POLITICAL REGIME, Madalina Maria BREZULEANU, Carmen Olguta BREZULEANU, Annals of "Dunarea de Jos" University of GalatiFascicle I. Economics and Applied InformaticsAnalele Universitatii "Dunărea de Jos" din Galați, Fascicola I. Economie și Informatică Aplicată, pag. 150-153, Print ISSN 1584-0409
- Mădălina-Maria BREZULEANU, Elena UNGUREANU, Raluca Sînziana ZAHARIA, CARMEN-OLGUȚA BREZULEANU, Studies on the Sustainable Impact of Artificial Intelligence in Technical and Agricultural University Education: Benefits Challenge and Future Directions, 2025, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 25, Issue 1, 2025, PRINT ISSN 2284-7995, E-ISSN 2285-3952
- LIBERTATEA ECONOMICĂ – VECTOR AL CREȘTERII, autor: Mădălina Brezuleanu, în volumul Conferinței Internaționale Economics, International Business and Cross-Cultural Communication (EIBC), nr. 2/2022, Ed. UAIC, Iași, pp. 67-74.
- STUDIES ON THE RESILIENCE OF CITIZENS IN THE CONTEXT OF WELL-BEING, Mădălina-Maria Brezuleanu, Carmen –Olguța Brezuleanu, International Conference "Risk in Contemporary Economy" ISSN-L 2067-0532 ISSN online 2344-5386 XXIIIth Edition, 2023, Galați, România, "Dunărea de Jos" University of Galați, România – Faculty of Economics and Business Administration, pp 87-92, DOI https://doi.org/10.35219/rce20670532151
- ASPECTS OF THE CONTRIBUTION OF THE LEADER APPROACH TO RURAL DEVELOPMENT IN ROMANIA – CASE STUDY: NORTH-EAST DEVELOPMENT REGION-Carmen-Olguța Brezuleanu, Mădălina-Maria Brezuleanu, Roxana Mihalache, Irina Susanu, Diana Elena Creangă, Elena Ungureanu, Journal of Applied Life Sciences and Environment, https://jurnalalse.com, https://doi.org/10.46909/alse-571123, Vol. 57, Issue 1 (197) / 2024: 37-72
- A QUALITATIVE PERSPECTIVE OF RELATIONSHIP BETWEEN ECONOMIC FREEDOM AND INDIVIDUAL WELL-BEING, Mădălina-Maria Brezuleanu,

Conferința științifică Internațională „PROMOVAREA VALORILOR SOCIAL-ECONOMICE ÎN CONTEXTUL INTEGRĂRII EUROPENE", Ediția a 6-a, 2023, pag. 138-142, ISBN: 978-9975-3611-0-1.

- ROMANIA IN CONTEXT OF THE NEW CHALLENGES OF THE CAP, 2016- Eduard Boghiță, Mădălina Maria BREZULEANU- în volumul: MULTICULTURAL REPRESENTATIONS-Literature and Discourse as Forms of Dialogue, Section: Communication, Journalism, Political Sciences and International Relations pag 83. Editura Arhipelag XXI Press, Târgu Mureș, ISBN: 978-606-8624-16-7, https://old.upm.ro/ldmd/LDMD-04/Cpr/Cpr%2004%2010.pdf
- ASPECTS OF THE USE OF COGNITIVE AND METACOGNITIVE LEARNING STRATEGIES OF ECONOMIC STUDENTS CONDITIONS, 2019, Carmen Olguța Brezuleanu, Roxana Mihalache, Mădălina Maria Cantea BREZULEANU, în volumul: IDENTITY AND DIALOGUE IN THE ERA OF GLOBALIZATION – COMMUNICATION, JOURNALISM, EDUCATION SCIENCES, PSYCHOLOGY AND SOCIOLOGY, Editura Ahipelag XXI Press, ISBN 978-606-8624-19-8, pag 37, http://www.icsumures.ro/manifestari-stiintifice/2019/Brosura_Program_GIDNI_6.pdf
- MANAGEMENT OF THE DEVELOPMENT OF THE SCHOOL ORGANIZATION IN THE POSTMODERN, 2019 Carmen Olguța Brezuleanu, Dan Donosă, Mădălina Maria Cantea BREZULEANU, în volumul: SOCIETY, IDENTITY AND DIALOGUE IN THE ERA OF GLOBALIZATION–COMMUNICATION, JOURNALISM, EDUCATION SCIENCES, PSYCHOLOGY AND SOCIOLOGY, Editura Ahipelag XXI Press, ISBN 978-606-8624-19-8, pag 45, http://www.icsumures.ro/manifestari-stiintifice/2019/Brosura_Program_GIDNI_6.pdf
- ASPECTS OF EDUCATION AND TRAINING OF YOUNG PEOPLE THROUGH TRANSDISCIPLINARY EDUCATIONAL PROJECTS -Carmen Olguța Brezuleanu, Mădălina Maria CANTEA BREZULEANU, University of Agricultural Sciences and Veterinary Medicine Iasi, în Volumul de Lucrări ştiinţifice - Seria Zootehnie, 2019 - Volumul 71,ISSN-L 1454 – 7368, https://www.uaiasi.ro/firaa/Pdf/Pdf_Vol_71/Carmen_Brezuleanu.pdf
- .MANAGEMENT OF THE DEVELOPMENT OF THE SCHOOL ORGANIZATION IN THE POSTMODERN SOCIETY, Carmen Olguța Brezuleanu, Dan Donosă, Mădălina Maria Brezuleanu, Identity and Dialogue in the Era of Globalization, Volume 6, 2019,Section: Communication, Journalism, Education Sciences, Psycology and Sociology, pag. 45-53,Târgu-Mureș : Arhipelag XXI Press, 2019 eISBN: 978-606-8624-19-8
- ASPECTS REGARDING THE RELATION BETWEEN ECONOMIC FREEDOM, DEMOCRACY AND DEVELOPMENT, Mădălina Maria BREZULEANU, în volumul Conferinței internaționale Lucrări Ştiinţifice Jurnal of Applied Life Sciences and Enviroment – vol. 64(1)/2021, seria Agronomie.
- ECONOMIC FREEDOM - MODERN SOCIETY GROWTH VECTOR" autor: Mădălina Brezuleanu, în volumul Conferinței internaționale Lucrări Ştiinţifice Jurnal of Applied Life Sciences and Enviroment – vol. 65(1)/2022, seria Agronomie
- ASPECTS ON ENSURING LIFE QUALITY THROUGH SUSTAINABLE DEVELOPMENT autori: Olguța-Carmen Brezuleanu, Mădălina-Maria BREZULEANU, în volumul Conferinței Internaționale Jurnal of Applied Life Sciences and Enviroment, VOL. 65, NR. 1 ISSN: 2069-7627, pag 161-168

- ASPECTS RELATED TO THE IMPLEMENTATION OF EUROPEAN INSTRUMENTS, PROGRAMS AND POLICIES FOR THE PROTECTION OF THE ENVIRONMENT IN THE ROMANIAN SPACE, Carmen–Olguța Brezuleanu, Diana Elena Creangă, Mădălina-Maria Brezuleanu, Alexandru Sorin Tudoran, în volumul Conferinței internaționale International Anatolian Agriculture, Food, Environment and Biology Congress, CONGRESS BOOK E-ISBN: 978-605-80461-5-3, 2022
- A QUALITATIVE PERSPECTIVE OF RELATIONSHIP BETWEENECONOMIC FREEDOM AND INDIVIDUAL WELL-BEING", Mădălina-Maria Brezuleanu, Conferința științifică Internațională „PROMOVAREA VALORILOR SOCIAL-ECONOMICE ÎN CONTEXTUL INTEGRĂRII EUROPENE", Ediția a 6-a, 2023, pag. 138-142, ISBN: 978-9975-3611-0-1.

j. Invenţii.

k. Contracte de cercetare:

- ȘCOALĂ ANTREPRENORIALĂ PENTRU SUSȚINEREA INIȚIATIVELOR DE AFACERI STUDENȚEȘTI INOVATIVE (SASIASI)- CNFIS-FDI-2019-0192, http://sas-usamviasi.ro/
- MODERNIZAREA ACTIVITĂȚII DE PREDARE-ÎNVĂȚARE-EVALUARE DIN ÎNVĂȚĂMÂNTUL SUPERIOR AGRONOMIC ȘI RESPECTAREA DEONTOLOGIEI ȘI ETICII ACADEMICE CNFIS-FDI-0258-2019 http://www.cnfis.ro/wp-content/uploads/2019/04/Rezultate_finale-FDI2019-lista_proiecte_domenii_site.pdf
- DEZVOLTAREA COMPETENȚELOR ȘI INIȚIATIVELOR DE AFACERI STUDENȚEȘTI PRIN INOVARE ÎN DOMENIUL AGRONOMIC CNFIS- FDI 0247-2020. http://www.cnfis.ro/wp-content/uploads/2020/03/FDI2020-Rezultate-finaleCNFIS-lista-proiecte-publicare.pdf
- CREȘTEREA VIABILITĂȚII ECONOMICE A FERMEI PRIN OPTIMIZAREA UTILIZĂRII FACTORILOR DE PRODUCŢIE ÎN CONDIȚII DE REZILIENȚĂ LA FACTORII CLIMATICI RESPECTÂND PRINCIPIILE DEZVOLTĂRII DURABILE- Contract de consultanță și cercetare dezvoltare nr. 9762/10.07.2023 între USV Iași și SC EVEL-H COMPANY SRL, jud. Vaslui.
- STUDII PRIVIND SEMIOTICA ȘI RETORICA ELEMENTELOR PUBLICITARE DIN DOMENIUL PREPARATELOR DIN CARNE- Contract de cercetare aplicativă nr, 6607/22.04.2024 între USV Iași și SC Industrializarea cărnii KOSAROM SA.
- DEZVOLTAREA DE SERVICII EDUCAȚIONALE DE CALITATE PRIN STAGII DE PRACTICĂ ÎN ÎNVĂȚĂMÂNTUL PROFESIONAL ȘI TEHNIC DIN DOMENIUL AGRICOL ȘI DE INDUSTRIE ALIMENTARĂ-cod proiect My Smis2021+:308587/2024, Beneficiar Colegiul Agricol și de Industrie Alimentară V. Adamachi Iași
-

H. Premii, distincţii.

ECONOMIC FREEDOM AND VARIETIES OF CAPITALISM, Mădălina-Maria Brezuleanu, Premiu: Medalie de BRONZ, în cadrul International Exihibition of Innovation and Technology Transfer EXCELLENT IDEA-2023.

I. Alte realizări semnificative:

1.

Data: **29/09/2025**

Dr. Ec. Brezuleanu Mădălina-Maria

Semnătura:

A.3.3.c – Lista de lucrari

Numele si prenumele: Brasoveanu Florian Alexandru

A. **Teza de doctorat**
B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**
C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.**
D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local**
E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web**
F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale**

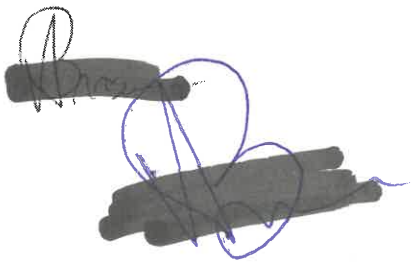
F1. FA Brașoveanu, A Burlacu, „On combining shape memory alloy actuators and pneumatic actuators for performance enhancement in soft robotics", 2024, Actuatros 13 (4), 127

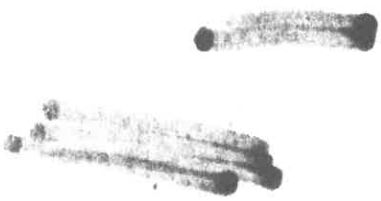
G. **Lucrări ştiinţifice publicate în reviste din străinătate**
H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS**
I. **Lucrări ştiinţifice publicate în volumele conferinţelor**

I1. FA Brașoveanu, A Burlacu, "Soft robotics modeling and simulation", SYROM and ROBOTICS 2022;
I2. FA Brașoveanu, A Burlacu, „Towards independent SMA actuators: A novel analog two-state control system for flexible robots", ETFA2023;
I3. Brașoveanu, FA., Burlacu, A. (2024). Soft Robotics: A Numerical Evaluation of Model-Based PneuNet Simulation. In: Doroftei, I., Kiss, B., Baudoin, Y., Taqvi, Z., Keller Fuchter, S. (eds) 25th International Symposium on Measurements and Control in Robotics. ISMCR 2023
I4. S. Hustiu, A. -I. Iancu and F. -A. Brasoveanu, "Integration of MITL for Cobots Workflow in a Manipulating Application," 2024 IEEE 29th International Conference on Emerging Technologies and Factory Automation (ETFA) 2024
I5. Braoveanu, FA., Iancu, AI., Botezatu, AP., Burlacu, A. 3-D Vision-Based Workspace with Deep Learning Capabilities for Autonomous Robot Manipulation. In: Doroftei, I., Lovasz, EC. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024.
I6. Florian-Alexandru Brașoveanu, Adrian Burlacu, Vibrations In Hybrid Soft Actuators: An Experimental Stability Analysis, 8th International Conference of the Doctoral School TUIASI, 2025

Data: 29 septembrie 2025 Numele și prenumele: Brasoveanu Florian-Alexandru

Semnătura





Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: GANCIU AURA

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

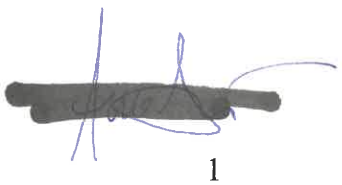
G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

- Ganciu, A., Burlacu, A., & Roşca, R. L. (2024, October). A pose-free 2D-3D hybrid approach for visual servoing control systems. In *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 527-532). IEEE.
- Sopon, I., Tincu, C., Ganciu, A., & Burlacu, A. (2023, October). Mixed Reality Framework for Eye-in-Hand Collaborative Robot-Human Interaction. In *2023 27th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 303-308). IEEE.



- Ganciu, A., & Burlacu, A. (2023, September). An Evaluation of the Dual Vectors Based Solutions for Robot-World/Hand-Eye Calibration. In *International Symposium on Measurements and Control in Robotics* (pp. 95-105). Cham: Springer Nature Switzerland.

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

- Asistent cercetare științifică (Team member – First stage researcher) - Activitate în cadrul Proiectului R3GROUP (101091869) - Resilient rapid ReconfiGurable pROdUction Process chains (în cadrul proiectului HORIZON Innovation Action, finanțat prin European Health and Digital Executive Agency). Angajator: Universitatea Tehnică „Gheorghe Asachi" din Iași
- Asistent cercetare științifică - Funcția P3_Expert_Junior (COR: 215237) – Activitate în cadrul proiectului PCIDIF Smis 334906, HUB Român de Inteligență Artificială - HRIA

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activități în cadrul comunității academice

- Membru CSUD (Consiliul Studiilot Universitare de Doctorat), IOSUD TUIASI

Data: 29 septembrie 2025

Numele și prenumele

GANCIU AURA

Semnătura

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Huștiu Ioana

A. Teza de doctorat.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

În reviste cotate ISI:

S. Hustiu, **I. Hustiu**, M. Kloetzer, C. Mahulea, *LTL Task Decomposition for 3D High-Level Path Planning*, Journal of Control Engineering and Applied Informatics, vol. 23(3), pp. 76-87, 2021.

În baze de date internaționale:

I. Hustiu, R. Abolpour, C. Mahulea, K. Marius, *Efficient path planning and task allocation algorithm for Boolean speccifications,* arXiv preprint arXiv:2506.04881, 2025.

În reviste indexate în baze de date internaţionale (BDI):

I. Hustiu, C. Mahulea, M. Kloetzer, *Software tool for distribution of linear temporal logic specifications*, IFAC-PapersOnLine, vol. 56 (2), pp. 6087-6092, 2023.

I. Hustiu, *Comparative study for path planning based on the decomposition of a co-safe LTL specification*, Bulletin of the Polytechnic Institute of Iași, vol. 69 (73), pp. 67-80, 2023.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

I. Hustiu, M. Kloetzer, C. Mahulea, Decomposition of LTL specifications via formal concurrency relations in Büchi automata, 30th International Conference on Emerging Technologies and Factory Automation (ETFA), Porto, Potugal, 2025.

I. Hustiu, M. Kloetzer, C. Mahulea, Motion planning for mobile robots through iterative task allocation, IEEE Conference on Control Technilogy and Applications (CCTA), San Diego, California, USA, pp. 708-785, 2025.

I. Hustiu, M. Kloetzer, C. Mahulea, Extension of a decomposition method for a global LTL specification, 28th International Conference on Emerging Technologies and Factory Automation (ETFA), Sinaia, Romania, 2023.

I. Hustiu, C. Mahulea, M. Kloetzer, Distributing co-safe LTL specifications to mobile robots, 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 306-311, 2022.

I. Hustiu, C. Mahulea, M. Kloetzer, Optimal task allocation for distributed co-safe LTL specifications, 26th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Vasteras, Sweden, 2021.

I. Hustiu, M. Kloetzer, C. Mahulea, Distributed path planning of mobile robots with LTL specifications, 24th International Conference on System Theory, Control and Computing (ICSTCC), pp. 60-65, 2020.

J. Invenţii.

K. Contracte de cercetare/granturi.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 27/09/2025

A.3.3.c – Lista de lucrari

Numele si prenumele: Barb-Ciorbea Mihaela Alexandra

A. **Teza de doctorat**
B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**
C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.**
D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local**
E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web**
F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale**

Barb Ciorbea M.A., 2024. Comparison between an exact and a heuristic-based traveling salesman problem with time window constraints". Bulletin of the Polytechnic Institute of Iasi. Electrical Engineering, Power Engineering, Electronics Section,

G. **Lucrări ştiinţifice publicate în reviste din străinătate**
H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS**

I. **Lucrări ştiinţifice publicate în volumele conferinţelor**

· Barb Ciorbea M.A., Kloetzer, M. and Mahulea, C. (2024). Planning strategy based on visibility graph and traveling salesman problem with time window constraints. In International Conference on System Theory, Control and Computing (ICSTCC).

· Barb Ciorbea M.A., Kloetzer, M. and Mahulea, C. (2024). Vehicle Routing Problem With Pick-up and Delivery Tasks in Obstacle-Cluttered Environment. In International Conference on System Theory, Control and Computing (ICSTCC).

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Crăciun Rareş

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Crăciun, R., Burlacu, A. (2025). AI-Based Battery Consumption Prediction for Nano-drones. In: Doroftei, I., Lovasz, EC. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024. Mechanisms and Machine Science, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-87537-3_10

Data: 29 septembrie 2025

Crăciun Rareş

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Prodan Adrian

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. "The performance impact of the graph topology in Ibm's Quantum devices on Grover's search algorithm", **A. Prodan**, V. Manta, and A. G. Tudorache, 25th International Conference on System Theory, Control and Computing (ICSTCC), Iasi, Romania, 2021
2. "Neuromarketing and Visual Attention Study Using Eye Tracking Techniques", Florina Ungureanu, Robert Gabriel Lupu, Adrian Cadar, **Adrian Prodan**, 21st International Conference on System Theory, Control and Computing (ICSTCC), 2017

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

1. Romanian National Quantum Communication Infrastructure (RoNaQCI), DIGITAL-2021-QCI-01, nr. 101091562, 143454.90 RON, 2023-2025, 10 membri, Funcţia: Expert junior / Asistent drd.

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Prodan Adrian

A.3.3.c – Lista de lucrari

Numele si prenumele: Botezatu Adrian-Paul

A. **Teza de doctorat**
B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**
C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.**
D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local**
E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web**
F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale**

F1. P. Botezatu, L. Ferariu, A. Burlacu, „Enhancing Visual Feedback Control through Early Fusion Deep Learning", 2023, Entropy 25 (10), 1378

F2. P. Botezatu, A. Burlacu, C. Orhei, „A Review of Deep Learning Advancements in Road Analysis for Autonomous Driving", 2024, Applied Sciences 14 (11), 4705

F3. P. Botezatu, A.Iancu, A. Burlacu, „A Hybrid Deep Learning Framework for Eye-in-Hand Visual Control Systems", Robotics, 2025

G. **Lucrări ştiinţifice publicate în reviste din străinătate**
H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS**

H1. P. Botezatu, A. Burlacu, "A Short Review of Deep Learning Methods in Visual Servoing Systems", Buletinul Institutului Politehnic din Iasi, Vol. 69, Nr. 3, 2023

I. **Lucrări ştiinţifice publicate în volumele conferinţelor**

I1. P.Botezatu, L.Ferariu, A.Burlacu, T.Sauciuc, "Early Fusion Based CNN Architecture for Visual Servoing Systems", 2022 26th International Conference on Methods and Models in Automation and Robotics (MMAR), 199-204

I2. T. Sauciuc, A. Burlacu, L. Ferariu, P. Botezatu, "SO 3-CNN: Learning Rigid Displacement using Depth Images and Orthogonal Dual Tensors", IECON 2022–48th Annual Conference of the IEEE Industrial Electronics Society, 1-6

I3. P. Botezatu, L. Ferariu, A. Burlacu, T. Sauciuc, "Visual Feedback Control using CNN Based Architecture with Input Data Fusion", 2022 26th International Conference on System Theory, Control and Computing (ICSTCC), 633-638

I4. Brasoveanu FA, Iancu AI, Botezatu AP, Burlacu A, „3D Vision based Workspace with Deep Learning Capabilities for Autonomous Robot Manipulation", 2024, Mechanism and Machine Science, vol 178, Springer

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență Automatică și Informatică Aplicată

Numele și prenumele: Paleu Tudor-Andrei

1. ***Lucrări publicate*** :

   - în volume ale conferinţelor (ISI web of Knowledge) ;

     - **Paleu TA**, Burlacu A, Pascal C, Policy transfer with maximum entropy deep reinforcement learning for real cart-pole control. In 2024 IEEE 20th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 1-7). IEEE, **2024**, WOS:001450074600047

2. ***Lucrări publicate în reviste indexate BDI***

   - **Paleu TA**, Pascal C, Reproducibility in Deep Reinforcement Learning with Maximum Entropy, 27th International Conference on System Theory, Control and Computing (ICSTCC), 428-433, IEEE, DOI: 10.1109/ICSTCC59206.2023.10308431, **2023**

3. ***Alte menţiuni***

Data:

01.10.2025

Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Georgiana-Sînziana Păucă

A. Teza de doctorat:

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

- - **Păucă G.S.** and C. -F. Caruntu, *MPC-based Dynamic Velocity Adaptation in Nonlinear Vehicle Systems: A Real-World Case Study*, Electronics 2024

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

- **Păucă G.S.** and C.F. Căruntu, *Velocity Computation for Vehicle Trajectory Tracking: A Comparative Analysis of Performance and Efficiency*, 24th International Conference on Control Systems and Computer Science, Bucharest, Romania, 2023.
- **Păucă G.S.** and C.F. Căruntu, *Automated Computing and Tracking of the Maximum Velocity on a Certain Road Sector*, 26th International Conference on System Theory, Control and Computing, Sinaia, Romania, 2022.

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

- **Păucă G.S.** and C. F. Caruntu, *Velocity Computation for Vehicle Trajectory Tracking: A Comparative Analysis of Performance and Efficiency*, 24th International Conference on Control Systems and Computer Science (CSCS), Bucharest, Romania, 2023
- **Păucă G.S.** and C. -F. Caruntu, *Nonlinear Model Predictive Control for Vehicle Dynamics with Optimized Velocity Profile*, 25th International Conference on Control Systems and Computer Science, 2025.
- **Păucă G.S.** and O. Pauca, C. -F. Caruntu, *Control of Vehicle Lateral Dynamics on Race Circuits with Variable Speeds*, 19th IEEE International Conference on Control and Automation, 2025.
- **Păucă G.S.**, L. Mirea, C. -F. Caruntu, *Adaptive MPC with Online Weight Tuning using Neural Networks*, 9th International Conference on Control, Automation and Diagnosis, 2025.

B. Premii, distincţii

- Best Student Contribution Award – 25th International Conference on Control Systems and Computer Science

Data: 29 septembrie 2025

Numele și prenumele: Georgiana-Sînziana Păucă

Semnătura [redacted]

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Roșca Radu - Laurențiu

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. **A. Burlacu, R. L. Rosca, A. I. Iancu and E. Cervera, "Pose-free visual servoing from 3D measurements," *2023 European Control Conference (ECC)*, Bucharest, Romania, 2023, pp. 1-6, doi: 10.23919/ECC57647.2023.10178149.**

Data: 29 septembrie 2025

Roșca Radu - Laurențiu

Semnătura [redacted]

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Iancu Andrei Iulian

A. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

- Botezatu, A.P., Iancu, A.I. and Burlacu, A., 2025. Hybrid Deep Learning Framework for Eye-in-Hand Visual Control Systems. Robotics, 14(5), p.66.

B. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

- Burlacu, Adrian, et al. "Pose-free visual servoing from 3D measurements." *2023 European Control Conference (ECC)*. IEEE, 2023.
- Hustiu, S., Iancu, A.I. and Brasoveanu, F.A., 2024, September. Integration of MITL for Cobots Workflow in a Manipulating Application. In 2024 IEEE 29th International Conference on Emerging Technologies and Factory Automation (ETFA) (pp. 01-08). IEEE.

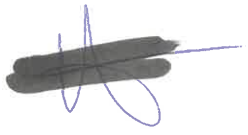
I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

- Hrib, Fănică-Valeriu, Andrei-Iulian Iancu, and Constantin-Cătălin Dosoftei. "Digital Twin and Virtual Reality: A Co-simulation Environment for an Educational Hydraulic Workstation." *2024 International Conference on Development and Application Systems (DAS)*. IEEE, 2024.
- Braoveanu, F.A., Iancu, A.I., Botezatu, A.P. and Burlacu, A., 2024, November. 3-D Vision-Based Workspace with Deep Learning Capabilities for Autonomous Robot Manipulation. In Joint International Conference of the International Conference on Mechanisms and Mechanical Transmissions and the International Conference on Robotics (pp. 244-253). Cham: Springer Nature Switzerland.

Data: 29 septembrie 2025

Iancu Andrei Iulian

Semnătura



Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Cocuț Gabriela Monica

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

- G. -M. Cocut, F. -C. Braescu and C. -F. Caruntu, "Real-Time Image Processing Algorithm for Enhanced Control of Lab-Scale Autonomous Vehicles," 2025 25th International Conference on Control Systems and Computer Science (CSCS), Bucharest, Romania, 2025, pp. 54-59, doi: 10.1109/CSCS66924.2025.00016.

Data: 29 septembrie 2025

Numele şi prenumele Cocuț Gabriela Monica

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Asist. drd. ing. Artene Codruț-Georgian

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Gabriela Brezeanu, Alexandru Archip, Codruț-Georgian Artene, Phish Fighter: Self Updating Machine Learning Shield Against Phishing Kits Based on HTML Code Analysis, IEEE Access, 13: 4460-4486, 2025.
2. Codrut-Georgian Artene, Ciprian Oprisa, Cristian Nicolae Butincu, Florin Leon, Finding Patient Zero and Tracking Narrative Changes in the Context of Online Disinformation Using Semantic Similarity Analysis, Mathematics, 11.9: 2053, 2023.
3. Codrut-Georgian Artene, Dumitru-Daniel Vecliuc, Marius Nicolae Tibeica, Florin Leon, An Experimental Study of Convolutional Neural Networks for Functional and Subject Classification of Web Pages, Vietnam Journal of Computer Science, 1-19, 2022.

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Dumitru-Daniel Vecliuc, Codruț-Georgian Artene, Marius-Nicolae Tibeică, Florin Leon, An Experimental Study of Machine Learning for Phishing Detection, Asian Conference on Intelligent Information and Database Systems, 427-439, 2021.
2. Codruț-Georgian Artene, Marius Nicolae Tibeică, Dumitru Daniel Vecliuc, Florin Leon, Convolutional neural networks for web documents classification, Asian Conference on Intelligent Information and Database Systems, 289-302, 2021.
3. Codruţ-Georgian Artene, Simona Caraiman, Adrian Burlacu, Paul Herghelegiu, Ground plane detection for wearable assistive devices for the visually impaired, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 81-86, 2021.

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

1. Codruţ-Georgian Artene, Marius Nicolae Tibeică, Florin Leon, Using BERT for Multi-Label Multi-Language Web Page Classification, 2021 IEEE 17th International Conference on Intelligent Computer Communication and Processing (ICCP), 307-312, 2021.

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

L. Premii, distincţii

M. Alte realizări semnificative

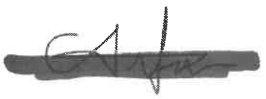
Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Artene Codruț-Georgian



Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Maftei Elena-Claudia

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Automated Estimation of the Edinburgh Visual Gait Score Using OpenPose System,E.-C. Maftei, O. Zvorișteanu, H.-N. Costin, S.-I. Bejinariu, F. Rotaru,2025 International Symposium on Signals, Circuits and Systems (ISSCS)
2. The Future of Therapy: A Study on Emotion Recognition Solutions Using NAO Robot, EC Maftei, O Zvorișteanu, International Conference on e-Health and Bioengineering, 728-736
3. Automated Assessment of Medical Rehabilitation of Gait by Means of Video Processing in Cloud Environment, EC Maftei, O Zvorișteanu, HN Costin, S Bejinariu, F Rotaru, V Manta, R. Luca, 2024 E-Health and Bioengineering Conference (EHB), 1-4

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

1. DIGITAL-2021-EDIH-01, eDIH-DIZ, membru, octombrie 2024 – prezent

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Data: 04 octombrie 2025

Maftei Elena-Claudia

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

NUMELE ŞI PRENUMELE: Asistent Drd. Ing. Oprea Petronela-Camelia

A. Teza de doctorat:

Domeniul de cercetare: Inginerie Electrică- „CERCETĂRI PRIVIND MĂSURAREA ȘI SIMULAREA RADIAȚIILOR ELECTROMAGNETICE NEIONIZANTE DIN PERSPECTIVA EXPUNERII UMANE (S.A.R)" (urmează a fi susținută)

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

- **Oprea P.C.***, Păuleț M.V., Sălceanu A., *Study on adult-child differences from the perspective of radiofrequency electromagnetic energy absorption*, International Conference on Electromechanical and Energy Systems (SIELMEN 2025), Metrology and Measurement Systems Section, Volume, (**2025**) DOI: acceptat (în curs de publicare)
- **Oprea P.C.***, Sălceanu A., Păuleț M.V., Moruz M.C., *Approach to floral digital models from a SAR perspective*, International Conference on Electromechanical and Energy Systems (SIELMEN 2025), Metrology and Measurement Systems Section, Volume, (**2025**) DOI: acceptat (în curs de publicare)
- Moruz M.C., **Oprea P.C.***, Sălceanu A., Vornicu S.C., *Evaluation of disturbing electromagnetic emissions produced by an electrosurgery unit*, International Conference on Electromechanical and Energy Systems (SIELMEN 2025), Metrology and Measurement Systems Section, Volume, (**2025**) DOI: acceptat (în curs de publicare)
- Moruz M.C.*, **Oprea P.C.**, *Mapping scientific progress in neurosurgical equipment from the perspective of electromagnetic interference in operating theatres*, Bulletin of the

Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Volume, (**2025**) DOI: în review

- Asmarandei V.D.*, Pingescu B.A., Burlică R., **Oprea P.C.**, Beniugă O., Astanei D., *Non-thermal plasma treatment of acetone-polluted wastewater from chemical industry processes*, Bulletin of the Polytechnic Institute of Iași, Chemistry, Chemical engineering, Environmental engineering Section, Volume, (**2025**), DOI: în review
- **Oprea P.C.***, Moruz M.C., Păuleț M.V., Sălceanu A., *On overview of the improvements supported by ICNIRP 2020 guidelines compared to their previous editions*, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, vol. 70, no. 1, pp. 87-98, (**2024**), DOI: 10.2478/bipie-2024-0006
- **Oprea P.C.***, Moruz M.C. *Theoretical approaches to bibliometric tools for SAR distribution*, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, VoL. (**2024**), DOI: în review
- **Oprea P.C.***, Păuleț M.V., Sălceanu A., *Study upon the influence of mobile phone communication technology on SAR distribution*, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Volume 69, nr.4, pp.45-56, (**2023**), DOI:10.2478/bipie-2023-0021
- **Oprea P.C.***, Sălceanu A., *Approaches to the realization of a virtual electric machine laboratory in Matlab&Simulink*, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, vol. 69, no. 1, pp. 85-96, (**2023**), DOI: 10.2478/bipie-2023-0005

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

- Matei-Constantin Moruz*, **Petronela-Camelia Oprea**, **2025**, 14-16 May, *MAPPING SCIENTIFIC PROGRESS IN NEUROSURGICAL EQUIPMENT FROM THE PERSPECTIVE OF ELECTROMAGNETIC INTERFERENCE IN OPERATING THEATRES*/ International Conference of the Doctoral School, Iasi, Romania;
- Mădălina Cojocariu*, Matei-Constantin Moruz[1], **Petronela-Camelia Oprea[1]**, **2024**, 15-18 May, *CURRENT DEVELOPMENTS IN THE TELEMEDICINE INFRASTRUCTURE IDENTIFIED WITH BIBLIOMETRIC TOOLS*/ International Conference of the Doctoral School, Iasi, Romania;
- Mădălina Cojocariu*, **Petronela-Camelia Oprea**, **2024**, 15-18 May, *RISKS AND LIMITATIONS OF THE USE OF TELEMEDICINE DEVICES FROM THE PERSPECTIVE OF ELECTROMAGNETIC INTERFERENCES*/ International Conference of the Doctoral School, Iasi, Romania;
- Matei-Constantin Moruz*, **Petronela-Camelia Oprea**, **2024**, 15-18 May, *STUDY ON THE ELECTROMAGNETIC EMISSIONS OF THE DEVICES THAT COULD BE USED*

IN A NEUROSURGERY OPERATING THEATRE/ International Conference of the Doctoral School, Iasi, Romania;

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

- **Oprea P.C.***, Păuleț M.V., Sălceanu A., *Study upon the influence of mobile phone protective case on SAR distribution*, IOP Conference Series: Materials Science and Engineering, Volume 1320, nr.1, pp. 12-22, (**2024**), DOI: https://iopscience.iop.org/article/10.1088/1757-899X/1320/1/012022

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

L. Premii, distincţii

M. Alte realizări semnificative

M.1. Participări la conferinţe internaţionale:

- International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinău, Metrology and Measurement Systems Section (2025).
- International Conference on Electromagnetic Fields, Signals and BioMedical Engineering, Cluj-Napoca, Electromagnetic Fields Section (2024).
- International Conference of the Doctoral School at the "Gheorghe Asachi", Iaşi, Electrical Engineering, Power Engineering, Electronics Section (Ediţiile 2023, 2024, 2025).

Membru în organizaţii profesionale:

- **MEMBRU** în COMISIILE de organizare ale programelor educaţionale în învăţământul preuniversitar la nivel naţional;
- **MEMBRU şi ORGANIZATOR** în COMISIILE de organizare a cercurilor metodice la nivel judeţean pentru învăţământul preuniversitar;
- **MEMBRU şi ORGANIZATOR** în COMITELELE de organizare a proiectelor europene educaţionale pentru învăţământul preuniversitar din cadrul Casei Corpului Didactic, Iaşi;

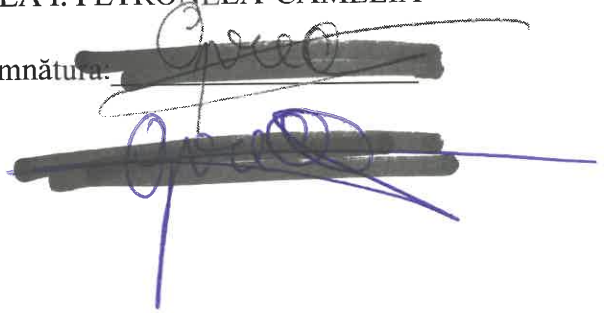
Organizator de manifestări ştiinţifice:

Activități în cadrul comunității academice:

Data: 29 Septembrie 2025

NUMELE ȘI PRENUMELE: Asist. Univ.Drd. Ing. OPREA I. PETRONELA-CAMELIA

Semnătura:



MEMORIU DE ACTIVITATE

1. Date biografice

Nume: BĂRBUȚĂ

Prenume: DELIA-ELENA

Data naşterii: 08.10.2000

Locul naşterii: mun. Iaşi, jud. Iaşi

Naţionalitatea: română

Starea civilă: necăsătorită

Domiciliu: Iaşi, str. Ursulea 8

Telefon: 0742684487

E-mail: delia-elena.barbuta@academic.tuiasi.ro

2. Studii preuniversitare

2011-2019: Colegiul National Iaşi. Media de finalizare: **9.96**, media la bacalaureat: **9.80**

3. Studii universitare

2019-2023: Universitatea Tehnică „Gheorghe Asachi", Facultatea de Automatică şi Calculatoare, Studii Universitare de Licenţă. Media de absolvire: **9.50**, media la examenul de diplomă: **10.**

2023-2025: Universitatea Tehnică „Gheorghe Asachi", Facultatea de Automatică şi Calculatoare, Studii Universitare de Masterat. Media de absolvire: **9.92**, media la examenul de disertaţie: **10.**

4. Activitatea didactică

2023-Prezent: Cadrul didactic asociat la disciplina **Programarea Calculatoarelor 2**.

2025-Prezent: Cadru didactic asociat la disciplina **Programare Web.**

5. Activitate ştiinţifică

- Lucrări ştiinţifice:
    - Alexandrescu, A., Bărbuță, D. E., Buțincu, C. N., Archip, A., Pavăl, S. D., Mironeanu, C., & Scînteie, G. A. (2025). Design Analysis for a Distributed Business Innovation System Employing Generated Expert Profiles, Matchmaking, and Blockchain Technology. *Future Internet*, *17*(4), 171.

- Bărbuţă, D. E., Scînteie, G. A, Alexandrescu. (2025, September). Modular AI-Enhanced System for Predictive and Real-Time Clinical Decision Support. In *2025 24rd RoEduNet Conference: Networking in Education and Research (RoEduNet)* (pp. 1-6). IEEE
- Gavrilă, M., Murariu, M.-G., Bărbuță, D.-E., Fotache, M., Trifina, L., & Tărniceriu, D. (2025). A Blockchain-Based System for Monitoring Sobriety and Tracking Location of Traffic Drivers. *Electronics*, *14*(18), 3728. https://doi.org/10.3390/electronics14183728
- Bărbuţă, D. E., Scînteie, G. A. & Caraiman, S. (2025, October). GPU Kernel Optimizations for Genetic Algorithms on CUDA. In *2025 29th International Conference on System Theory, Control and Computing (ICSTCC)* (IEEE).
- Gavrilescu, M., Scînteie, G. A., Bărbuţă, D. E. & Leon, F. (2025, October). Improving Maze Exploration and Evacuation with Reactive Agents through Directional Weighting. In *2025 29th International Conference on System Theory, Control and Computing (ICSTCC)* (IEEE).
- Alexandrescu, A., Bărbuță, D. E., Buțincu, C. N., Scînteie, G. A., Pavăl, S. D., Archip, A., Mironeanu, C., Tăune, M. S., Grăunte. C., Butnaru, G., & Caraiman, S. (2025, October). SPARK-IT: A Decentralized Blockchain and AI-Driven Ecosystem for Trusted and Transparent Innovation Collaboration. In *2025 29th International Conference on System Theory, Control and Computing (ICSTCC)* (IEEE).
- Gavrilă, M., Murariu, M. G., Bărbuță, D. E., Mihăilescu, E., & Tărniceriu, D. (2024, June). Enhancing driver safety through a data collection platform. In *2024 16th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)* (pp. 1-8). IEEE.
- Bărbuţă, D. E., Alexandrescu, A., Tărniceriu, D., & Gavrilă, M. (2024, September). Leveraging Blockchain to Enhance the Efficiency and Data Integrity of Systems Monitoring Drivers' Sobriety. In *2024 23rd RoEduNet Conference: Networking in Education and Research (RoEduNet)* (pp. 1-6). IEEE
- Gavrilă, M., Murariu, M. G., Bărbuță, D. E., & Tărniceriu, D. (2024, October). Development of a modular sensor battery integrated with a data collection platform for alcohol level detection and driver geolocation. In *2024 15th International Conference on Communications (COMM)* (pp. 1-6). IEEE.
- Bărbuţă, D. E., & Alexandrescu, A. (2024, October). A Secure Real Estate Transaction Framework Based on Blockchain Technology and Dynamic Non-Fungible Tokens. In *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 558-563). IEEE.
- Gavrilă, M., Fotache, M., Bărbuţă, D. E., Alexandrescu, A., Murariu, M. G., Ambrozie, R. E., & Tărniceriu, D. (2024, November). Sensor data analysis in a real-time iot and blockchain-based system for monitoring driver alcohol levels. In *2024 International Symposium on Electronics and Telecommunications (ISETC)* (pp. 1-6). IEEE.
- Bărbuţă, D. E., & Alexandrescu, A. (2023, October). A Decentralized Paper Dissemination System Employing Blockchain Technology, Peer Review and Expert Badges. In *2023 27th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 321-326). IEEE.

- Proiecte de cercetare (membru):
  - **SPARK-IT: Igniting innovation through trust, collabortation and expert mentorship**. Funding from the Next Generation Internet Initiative (NGI) within the framework of the "NGI TrustChain project", which was funded by the European Union's Horizon Europe research and innovation programme under grant agreement No. 101093274.

- **Blockchain-based Decentralized and Self-Sovereign Identities (DIDSSI).** Funding from the European Union's Horizon Europe Research and Innovation Programme, within the framework of the NGI Sargasso project under grant agreement No. 101092887
- **Optimizarea procesului de producție.** Funding from Digital Innovation Zone (eDIH DIZ).
- **Tangrama Medvolution: Evoluăm împreună pentru o sănătate mai bună, redefinind inovatia în medicină, SMIS code 338516.** Funding from "Agenția pentru Dezvoltare Regională Nord-Est (ADR Nord-Est)", call "Sprijin pentru dezvoltarea capacității de inovare a IMM, prin proiecte de CDI și investiții în IMM, necesare pentru dezvoltarea de produse și procese inovative, PR/NE/2024/P1/RSO1.1/RSO1.3/1 - PROIECTE DE CDI ȘI INVESTIȚII ÎN IMM".

- Co-chair în cadrul conferinței *29th International Conference on System Theory, Control and Computing (ICSTCC)*
- Deținătoare a bursei de cercetare „Regele Carol I", în perioada 2023-2025, oferită de Ministerul Cercetării, Inovării și Digitalizării

A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de master Ingineria sistemelor

Numele şi prenumele: Huștiu Sofia

A. Teza de doctorat.

Temporal Logic Objectives in High-Level Path Planning: Discrete-Event-Based Conceptual Framework (Obiective de logică temporală în planificarea de nivel înalt a traiectoriilor: Cadru conceptual structurat pe sisteme cu evenimente discrete), Conducător de doctorat - Prof. Dr. Ing. Octavian-Cezar Păstrăvanu (Romania 2020-2025) și Prof. Dr. Ing. Cristian Florentin Mahulea (Spania 2020 - 2025).

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

În reviste cotate ISI:

Hustiu, S., Mahulea, C., Kloetzer, M. and Lesage, J.J., 2024. On multi-robot path planning based on Petri net models and LTL specifications. *IEEE Transactions on Automatic Control*. vol. 69, no. 9, pp. 6373-6380, Sept. 2024, doi: 10.1109/TAC.2024.3386024 (Q1, IF = 6.2)

Hustiu, S., Hustiu, I., Kloetzer, M. and Mahulea, C., 2021. LTL task decomposition for 3D high-level path planning. *Journal of Control Engineering and Applied Informatics*, *23*(3), pp.76-87. (Q4, IF = 0.4)

În baze de date internaționale:

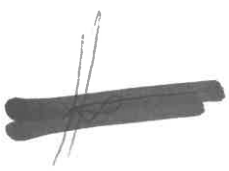
HUŞTIU, S., 2021. PREREQUISITES TO DESIGN A COLLISION FREE TRAJECTORY IN A 3D DYNAMIC ENVIRONMENT FOR AN UAV, Bulletin of the Polytechnic Institute of Iași

În reviste indexate în baze de date internaţionale (BDI):

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.



- **Hustiu, S.,** Iancu, A.I. and Brasoveanu, F.A., 2024, September. Integration of MITL for Cobots Workflow in a Manipulating Application. In *2024 IEEE 29th International Conference on Emerging Technologies and Factory Automation (ETFA)* (pp. 01-08). IEEE.

- **Hustiu, S.,** Dimarogonas, D.V., Mahulea, C. and Kloetzer, M., 2023, June. Multi-robot motion planning under MITL specifications based on time petri nets. In *2023 European Control Conference (ECC)* (pp. 1-8). IEEE.

- **Hustiu, S.,** Kloetzer, M., López-Martínez, A. and Mahulea, C., 2022, September. Whitening of greenhouse's roof using drones and petri net models. In *2022 IEEE 27th International Conference on Emerging Technologies and Factory Automation (ETFA)* (pp. 1-8). IEEE.

- **Hustiu, S.,** Mahulea, C. and Kloetzer, M., 2022. Parallel Motion Execution and Path Rerouting for a Team of Mobile Robots. *In 2022 16th IFAC Workshop on Discrete Event Systems (WODES), IFAC-PapersOnLine*, *55*(28), pp.73-78.

- **Hustiu, S.,** Kloetzer, M. and Mahulea, C., 2021, October. Mission assignment and 3d path planning for a team of UAVs. In *2021 25th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 401-406). IEEE.

- **Hustiu, S**., Kloetzer, M. and Burlacu, A., 2020, October. Collision Free Path Planning for Unmanned Aerial Vehicles in Environments with Dynamic Obstacles. In *2020 24th International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 520-525). IEEE.

- Lupascu, M., **Hustiu, S**., Burlacu, A. and Kloetzer, M., 2019, October. Path planning for autonomous drones using 3d rectangular cuboid decomposition. In *2019 23rd International conference on system theory, control and computing (ICSTCC)* (pp. 119-124). IEEE.

- **Huştiu, S.**, Lupaşcu, M., Popescu, Ş., Burlacu, A. and Kloetzer, M., 2018, October. Stable hovering architecture for nanoquadcopter applications in indoor environments. In *2018 22nd International Conference on System Theory, Control and Computing (ICSTCC)* (pp. 659-663). IEEE.

J. Inventii.

K. Contracte de cercetare/granturi.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 27/09/2025

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Sauciuc Teodor Andrei

A. Teza de doctorat:
B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:
C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)
D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:
E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:
F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale
F.1. Lucrări ştiinţifice publicate în reviste cotate ISI
F.2. Lucrări ştiinţifice publicate în reviste indexate BDI
G. Lucrări ştiinţifice publicate în reviste din străinătate
H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

1. **Adrian-Paul Botezatu, Lavinia Ferariu, Adrian Burlacu, Teodor Sauciuc, Visual Feedback Control using CNN Based Architecture with Input Data Fusion, 26th International Conference on System Theory, Control and Computing (ICSTCC), 2022**
2. **Teodor-Andrei Sauciuc, Adrian Burlacu, Lavinia Ferariu, Paul-Adrian Botezatu, SO3-CNN: Learning Rigid Displacement using Depth Images and Orthogonal Dual Tensors, IECON 2022–48th Annual Conference of the IEEE Industrial Electronics Society**
3. **Adrian-Paul Botezatu, Lavinia Ferariu, Adrian Burlacu, Teodor-Andrei Sauciuc, Early Fusion Based CNN Architecture for Visual Servoing Systems, 26th International Conference on Methods and Models in Automation and Robotics (MMAR), 2022**
4. **Ferariu Lavinia, Sauciuc Teodor, Semantic Segmentation of Street Scenes Using a Hybridisation between 3D Features and CNNs, 2020 25th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Vienna, Austria**

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science
I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI
I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale
I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale
I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale
J. Invenţii.
K. Contracte de cercetare/granturi
L. Premii, distincţii
M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activități în cadrul comunității academice

Data: 29 septembrie 2025

Numele și prenumele
Sauciuc Teodor-Andrei
Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Hobincă Radu-Cosmin

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. Hobincă, Radu-Cosmin, and Lavinia-Eugenia Ferariu. "Colouring Grayscale Images Using Cycle-Generative-Adversarial Networks." *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)*. IEEE, 2024. https://doi.org/10.1109/ICSTCC62912.2024.10744742

Data: 01 octombrie 2025

Hobincă Radu-Cosmin

Semnătura [redacted]

A.3.3.c - Lista de lucrări

Numele şi prenumele: Pleşcan Denis-Ioan

A. **Teza de doctorat**

B. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**

C. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.**

D. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local**

E. **Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web**

F. **Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale**

G. **Lucrări ştiinţifice publicate în reviste din străinătate**

H. **Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS**

I. **Lucrări ştiinţifice publicate în volumele conferinţelor**

   a. I. Sopon, D. -I. Plescan and A. Burlacu, "Immersive Mixed Reality Framework for Enhanced Human-Robot Collaboration," 2024 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2024, pp. 545-550, doi: 10.1109/ICSTCC62912.2024.10744744.

[redacted]

ing Plescan Denis-Ioan

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele și prenumele: Munteanu Alexandru

M. Alexandru, Studiu de caz privind integrarea unui robot colaborativ în fizioterapie, Sesiunea de Comunicări Științifice Studențești (SCSS), Iași, România, 2024.

Data: 29 septembrie 2025

Munteanu Alexandru

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Prisăcariu Ana-Maria

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. AM Prisăcariu, L Ferariu, Skin Cancer Diagnosis Using CNN with Attention Mechanisms Based on Grad-CAM, *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)*. IEEE, 2024. https://doi.org/10.1109/ICSTCC62912.2024.10744754

Data: 02 octombrie 2025

Prisăcariu Ana-Maria

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată și Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Conţac Alexandru

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

1. A Conţac, A Burlacu, Dynamic Path Planning for Drone Operations in Partially Known Environments, 29th International Conference on System Theory, Control and Computing (ICSTCC), Cluj-Napoca, România, 2025.

Data: 02 octombrie 2025

Conţac Alexandru

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Coșa Andrei Valeriu

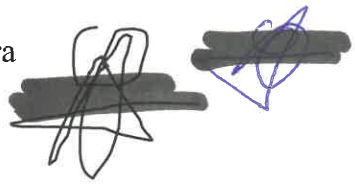
A. Lucrări ştiinţifice publicate în volumele conferinţelor

A.-V. Coșa, C.-M. Pascal, Safety Improvements of Standard Industrial Robots for Close-Proximity
Operations, Student's International Scientific Conference SECOSAFT 2025, Sibiu, Romania / Scientific Conference for Bachelor Degree Students CADET-NAV 2025, Constanta, Romania
A.-V. Coșa, S. Tonu, Vulnerabilități ale platformelor embedded. Tehnici de mitigare și protecție, Sesiunea de Comunicări Științifice Studențești (SCSS), Iași, România, 2024.

Data: 10.10.2025

Numele și prenumele: Cosa Andrei Valeriu

Semnătura



A.3.3.c - Lista de lucrări

Lista de lucrări în domeniul de studii universitare de licență Ingineria sistemelor

Numele şi prenumele: Tonu Sebastian

A. Teza de doctorat.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

- **S. Tonu**, L.-E. Ferariu, Deep Models With and Without Early Fusion For Automatic Lip Reading, 29th International Conference on System Theory, Control and Computing (ICSTCC), Cluj-Napoca, România, 2025.
- **S. Tonu**, L.-E. Ferariu, Methods for recognizing text from lip movement, Best Romanian AI Thesis Awards (BRAIT), Iași, România, 2025.
- **S. Tonu**, L.-E. Ferariu, Metode pentru recunoașterea textului din mișcarea buzelor, Sesiunea de Comunicări Științifice Studențești (SCSS), Iași, România, 2025.
- A.-V. Coșa, **S. Tonu**, Vulnerabilități ale platformelor embedded. Tehnici de mitigare și protecție, Sesiunea de Comunicări Științifice Studențești (SCSS), Iași, România, 2024.

J. Invenţii.

K. Contracte de cercetare/granturi.

L. Premii, distincţii.

M. Alte realizări semnificative.

Data: 30/09/2025

Ing. Sebastian Tonu
Semnătura:

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Tudose Laura

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

1. C. Budaciu and L. Tudose, Design and implementation of a butterfly robot system, Emerging Technologies and Factory Automation ETFA 2019 (indexata IEEE, indexata Scopus)

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Tudose Laura

Semnătura

Lista de lucrări în domeniul de studii universitare de licență
Automatică. Informatică Aplicată si Sisteme Inteligente / Ingineria sistemelor

Numele şi prenumele: Cobuz Adelina-Nicoleta

A. Teza de doctorat:

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate:

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local:

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web:

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

F.1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Adelina-Nicoleta Cobuz, Ionut Sopon, Adrian Paul Botezatu, Florian-Alexandru Brasoveanu, Adrian Burlacu, Digital Twin-Based Architecture for Efficiency and Safety Enhancement in Dynamic Workspaces, 29th International Conference on System Theory, Control and Computing (ICSTCC), Cluj-Napoca, România, 2025.

F.2. Lucrări ştiinţifice publicate în reviste indexate BDI

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Lucrări ştiinţifice publicate în volumele conferinţelor indexate ISI Web of Science

I.2. Lucrări ştiinţifice publicate în volumele conferinţelor indexate BDI

I.3. Alte lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale şi naţionale

I.3.1. Lucrări ştiinţifice publicate în volumele unor conferinţe internaţionale

I.3.2. Lucrări ştiinţifice publicate în volumele unor conferinţe naţionale

J. Invenţii.

K. Contracte de cercetare/granturi

L. Premii, distincţii

M. Alte realizări semnificative

Membru în organizaţii profesionale:

Organizator de manifestări ştiinţifice:

Activităţi în cadrul comunităţii academice

Data: 29 septembrie 2025

Numele şi prenumele COBUZ ADELINA NICOLETA

Semnătura