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Lista de lucrări pentru perioada 2012-2021

A. Participarea cu lucrări pentru manifestări și publicații ale ASTR

1. **Lazar C.**, Regenerative and anti-lock braking unified control of an electric vehicle, a XVI-a editie a Conferinței "*Zilele Academiei de Ştiinţe Tehnice din România"*, 21-22 octombrie, 2021 (online).
2. **Lazar C.**, Feedforward predictive controller for CACC systems, a XV-a ediție a Conferinței „*Zilele Academiei de Ştiinţe Tehnice din România",* 26 – 27 noiembrie, 2020 (online).
3. **C. Lazar**, Analiza stabilității șirului de vehicule autonome ale unui pluton, *a XIII-a* ediție a Conferinței „*Zilele Academiei de Ştiinţe Tehnice din România"*, Ploiești, 17-19 Octombrie 2018.
4. **Lazar C.**, A Tiganasu, Control-Oriented Models for Vehicle Longitudinal Motion, *Journal of Engineering Sciences and Innovation*, Volume 3, Issue 3, 2018, pp. 251 – 264.
5. **Lazar C.**, Control-oriented models for vehicle longitudinal motion, *A XII-a* ediție a Conferinței „*Zilele Academiei de Ştiinţe Tehnice din România"*, Constanța, 6-7 octombrie, 2017.
6. **Lazar C.**, Cooperative control of vehicle platoons for urban congestion reduction, a XI-a ediție a Conferinței „*Zilele Academiei de Ştiinţe Tehnice din România"*, Tîrgu Mureş, 6-7 Octombrie, 2016.
7. **C.Lazar**, Algoritmi de control predictiv pentru sistemele servoing vizuale ale roboților manipulatori, *a IX-a ediţie a Conferinţei „Zilele Academiei de Ştiinţe Tehnice din România"*, Sibiu, 6-7 noiembrie, 2014.
8. **Lazar C.**, Formarea profesională continuă a inginerilor în domeniile automatică avansată, tic şi managementul cunoştinţelor, *a VIII-a ediţie a Conferinţei „Zilele Academiei de Ştiinţe Tehnice din România"*, Brasov, 4-5 octombrie, 2013

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. (WoS)
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. (WoS)

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 (WoS)

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

1. Burlacu A., Condurachi D., **Lazar C.**, (2021) *Motion Parametrization and Control: Advances and Aplications*, Matrix Rom, București, 2021, ISBN: 978-606-25-0653-7.
2. Caruntu C. A. Maxim, **C. Lazăr**, *Advanced control strategies for networked/distributed systems – theory and applications*, Ed. MatrixRom, București, 2019, ISBN 978-606-250-504-2
3. Caruntu C. F. , **C. Lazăr**, *Modelare si control predictiv*, Ed. Politehnium, 2013, ISBN 978-973-621-413-4
4. Caruntu C. F., C. Budaciu, **C. Lazăr**, *Ingineria Reglarii Automate – îndrumar laborator*, Ed. Politehnium, 2013, ISBN 978-973-621-414-1
5. **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

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

1. **Lazar C.**, Ingineria reglarii automate, note de curs, TUIasi, https://edu.tuiasi.ro/course/view.php?id=646
2. **Lazar C.**, Sisteme de vedere artificiala, note de curs, TUIasi, https://edu.tuiasi.ro/course/view.php?id=451
3. **Lazar C.** Controlul sistemelor auto, note de curs, TUIasi, https://edu.tuiasi.ro/course/view.php?id=711
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

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

❖ *E1 Reviste cotate Clarivate Analytics Web of Science (ISI)*

1. 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. (FI=0.973)
2. 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. (FI=4.504)
3. 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**.** (FI=8.236)
4. 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. (FI=5.123)

5. 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**.** (FI=3.527)
6. 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. (FI=0.973)
7. 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. (FI=2.888)
8. 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. (FI=6.485)
9. 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. (FI=3.498)
10. 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. (FI=0.973)
11. C. Copot, **C. Lazar,** A. Burlacu (2012). Predictive Control of Nonlinear Visual Servoing Systems using Image Moments, *IET Control Theory and Applications*, **I**6 (10), 1486-1496. (FI=3.527)
12. C. Budaciu, **C. Lazar** (2012). Predictive Control Realization in Delta Domain for Automotive Powertrain System and Finite Word Length Representation, *Control Engineering and Applied Informatics*, 14 (4), 50-58. (FI=0.973)
13. A. Burlacu and **C. Lazar** (2012). Reference trajectory based visual predictive control*, Advanced Robotics*, Vol.26, No.8-9, pp. 1035-1054, 2012. (FI=1.699)
14. C. F. Caruntu and **C. Lazar** (2012). Robustly stabilizing MPC design for networked control systems with an application to DC motors, *IET Control Theory and Applications*, 6 (7), 943-952. (FI=3.527)

- ❖ *E2 Reviste indexate BDI*

1. Tiganasu A., **Lazar C.** (2019). String Stability Analysis of Adaptive Cruise Control Vehicle Platoons, *Buletinul Institutului Politehnic din Iași, sectia Electrotehnică. Energetică. Electronică,* 65 (69) Nr. 1, pp. 41-51.
2. **Lazar C.**, Burlacu A. (2016). A Control Predictive Framework for Manipulation via Predictive Control – a Survey of Some Results*, Memoirs of the Scientific Sections of the Romanian Academy*, Tome XXXIX, 2016, pp. 71-81.
3. Maxim A., Caruntu F.C., **Lazar C**. (2014). Implementation Issues for Distributed Model Predictive Control of a Two Agent System, *Buletinul Institutului Politehnic din Iași, Automatic Control and Computer Science Section,* Tomul LX (LXIV), Fasc. 3-4, 2014, pp. 69-85.
4. Patrascu D., **Lazar C**. (2014). Optimal Operations of a Hybrid Electric Vehicle Based on the Prediction of the Torque And Power Availabilities, *Buletinul Institutului Politehnic din Iași, Automatic Control and Computer Science Section,* Tomul LX (LXIV), Fasc. 2, 2014, pp. 9-28
5. A. Petrovici and **C. Lazar** (2012). Altered fingerprints analysis based on sift keypoints,*Buletinul Institutului Politehnic din Iași, Automatic Control and Computer Science Section,* Tomul LVIII (LXII), Fasc. 3, 2012, pp. 9-22.
6. A. Burlacu and **C. Lazar** (2012). A Behavior-Based Visual Predictive Control Strategy, ,*Buletinul Institutului Politehnic din Iași, Automatic Control and Computer Science Section*, Tomul LVIII (LXII), Fasc. 2, 2012, pp. 73-88.

7. C. F. Căruntu and **C. Lazăr** (2012). Network-Induced Time-Varying Delay Modeling for Compensation Through Predictive Control, *Buletinul Institutului Politehnic din Iași, Automatic Control and Computer Science Section*, Tomul LVIII (LXII), Fasc. 1, 2012, pp. 63-82.

F.Lucrări ştiinţifice publicate în volumele conferinţelor.

❖ *F1 Volume indexate Clarivate Analytics Web of Science (ISI)*

1. Maxim A., **Lazar C.**, C.F. Caruntu (2020). Distributed Model Predictive Control Algorithm with Communication Delays for a Cooperative Adaptive Cruise Control Vehicle Platoon, 28th Mediterranean Conference on Control and Automation (MED), Saint-Raphaël, France, pp. 909-914.
2. Baciu A., **C Lazar** (2020). Model-Free iPD Control Design for a Complex Nonlinear Automotive System, 24th International Conference on System Theory, Control and Computing (ICSTCC), 8-10 October 2020, Sinaia, Romania
3. Tiganasu A., **C Lazar**, CF Caruntu (2020). Cooperative Vehicle Following Based on Predictive Control with Communication Delay Compensation, 24th International Conference on System Theory, Control and Computing (ICSTCC), 8-10 October 2020, Sinaia, Romania
4. Maxim, A., O. Pauca, C. F. Caruntu, and **C. Lazar** (2020). 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), 8-10 October 2020, Sinaia, Romania.
5. **Lazar C.**, Tiganasu A (2019). String Stable Vehicle Platooning Using Adaptive Cruise Controlled Vehicles, 9th IFAC International Symposium on Advances in Automotive Control, 24-27 June, 2019, Orléans, France, IFAC-PapersOnLine, Volume 52, Issue 5, pp. 1-6.
6. CF Caruntu, C Copot, **C Lazar**, R De Keyser (2019), Decentralized Predictive Formation Control for Mobile Robots without Communication, 2019 IEEE 15th International Conference on Control and Automation (ICCA), July 16-19, 2019, Edinburgh, Scotland
7. A Maxim, CF Caruntu, **C Lazar**, R De Keyser, MC Ionescu (2019). Comparative Analysis of Distributed Model Predictive Control Strategies, 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), 9-11 October 2019, Sinaia, Romania, pp. 468-473
8. O Pauca, CF Caruntu, **C Lazar** (2019). Predictive Control for the Lateral and Longitudinal Dynamics in Automated Vehicles, 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), 9-11 October 2019, Sinaia, Romania, pp. 797-802.
9. A Baciu, **C Lazar** (2019) Model Free Speed Control of Spark Ignition Engines, 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), 9-11 October 2019, Sinaia, Romania, pp. 480-485.
10. A. Maxim, J. M. Maestre, C. F. Caruntu, and **C. Lazar** (2019), Min-max coalitional model predictive control algorithm. 22nd International Conference on Control Systems and Computer Science, May 28-30, 2019, Bucharest, Romania
11. **Lazar, C.**; Tiganasu, A.; Caruntu, C. F., (2018). Arterial Intersection Improvement by Using Vehicle Platooning and Coordinated Start, IFAC Papersonline Volume: 51 Issue: 9 pp. 136-141.
12. A. Maxim, J. M. Maestre, C. F. Caruntu, and **C. Lazar** (2018). Robust coalitional distributed model predictive control algorithm with stability via terminal constraint. In *Proceedings of the 2018 IEEE Conference on Control Technology and Applications*, Copenhagen, Denmark, August 21-24, pages 964–969.

13. Maxim A., Caruntu CF, **Lazar C**. (2017). Cruise and headway control for vehicle platooning using a distributed predisctive control algoritm, 21st International Conference on System Theory, Control and Computing, Sinaia, 19-21 October 2017.
14. CF Caruntu, C Copot, **C Lazar** (2017). Wireless vehicle-to-infrastructure data gathering for robot platooning, 2017 25th Mediterranean Conference on Control and Automation (MED), pp. 1083-1088.
15. Tiganasu A., **Lazar C.** (2017). Caruntu CF, Cyber Physical Systems-Oriented Design of Cooperative Control for Vehicle Platooning, 21st International Conference on Control Systems and Computer Science (CSCS), Bucharest, 29-31 May,2017, pp.465-470.
16. Caruntu CF, **Lazar C.**, AN Vargas (2017). Chance-constrained model predictive control for vehicle drivetrains in a cyber-physical framework*, 2017 International Conference on Engineering, Technology and Innovation* (ICE/ITMC), Madeira, 27-29 June 2017
17. **Lazar C.**, Psenita C., Tiganasu A., (2016). Comparative Analysis of Orientation Field Descriptors Used for Detecting Altered Fingerprints, *20th International Conference on System Theory, Control and Computing*, Sinaia, 13 - 15 October 2016, pp. 715-720.
18. Tiganasu A., **Lazar C.**, Caruntu CF, (2016). Design and simulation evaluation of cooperative adaptive cruise control for a platoon of vehicles, *20th International Conference on System Theory, Control and Computing*, Sinaia, 13 - 15 October 2016, pp. 669-674.
19. Maxim A., Caruntu CF, **Lazar C**., (2016), Distributed model predictive control algorithm for vehicle platooning, *20th International Conference on System Theory, Control and Computing*, Sinaia, 13 - 15 October 2016, pp. 657-662.
20. Maxim A. , C. Ionescu, C. Caruntu, **C. Lazar**, R. De Keyser, (2016). Reference tracking using a non-cooperative distributed model predictive control algorithm, Proceedings of the *11th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems*, Trondheim, Norway, June 6-8, pp. 673 – 678.
21. Alionte E., **Lazar C.**, (2015). A practical implementation of face detection by using Matlab cascade object detector, *Proc. of 19th International Conference on System Theory, Control and Computing*, Sinaia, pp. 785 – 790
22. Carpiuc, S. and **Lazar, C.** (2015). Multi-rate predictive cascade speed control of synchronous machines in automotive electrical traction drives, *23th Mediterranean Conference on Control and Automation* (MED), Torremolinos, pp. 357-363
23. Carpiuc, S. and **Lazar, C.** (2015). Multi-rate predictive cascade DC-link voltage control in hybrid electric vehicles, *Proc. of 19th International Conference on System Theory, Control and Computing*, Sinaia, pp. 478-483.
24. Tiganasu A., **Lazar C**.,(2015). LabVIEW traction control dynamic simulator, *Proc. of 19th International Conference on System Theory, Control and Computing*, Sinaia, pp. 791– 796
25. Maxim A., **Lazar C.**, Caruntu C.F., (2015). A Computationally Efficient Non-cooperative Distributed Model Predictive Control Algorithm for Two Agent Systems, *20th International Conference on Control Systems and Computer Science*, Bucharest, pp. 673 – 678
26. Carpiuc S. C., **Lazar C.**, (2014). State-Feedback Current Control of Permanent Magnet Synchronous Machine based Automotive Electrical Traction Drives under Real-Time and Physical Constraints, 18th International Conference System Theory, Control and Computing (ICSTCC), Sinaia, October 17-19, pp 506-5011.
27. Carpiuc S. C., **Lazar C.**, (2014). Lyapunov-Based Constrained Explicit Current Predictive Control in Permanent Magnet Synchronous Machine Drives*, International Symposium on Power Electronics, Electrical Drives, Automation and Motion* (Speedam), Ischia, 461-466.
28. Carpiuc S. C., **Lazar C.**, (2014). Predictive DC-Link Voltage Control of Permanent Magnet Synchronous Machine Drives for Hybrid Electric Vehicles, *IEEE Conference on Control Applications* (CCA), Antibe/Nice, 41-46

29. CF Caruntu, **C Lazar** (2014). Observer-based controller design for networked predictive control of an automotive drivetrain with backlash, *Proc. IFAC 19th World Congress*,19(1), Cape-Town, August 24-30, 2014,pp. 10337-10342.
30. CF Caruntu, C Copot, **C Lazar**, R De Keyser (2014). Longitudinal control of vehicle platoons for stop-and-go waves mitigation, *Proc. of 18th International Conference on System Theory, Control and Computing*, Sinaia, October 17-19, 2014, pp. 670-675
31. Carpiuc, S. and **Lazar, C.** (2014). Energy–efficient model predictive speed control of permanent magnet synchronous machine based automotive traction drives. *Proc. of IEEE Vehicle Power and Propulsion Conference* (VPPC), Coimbra, October 28-30, 2014.
32. Carpiuc S. C., **Lazar C.**, (2013). Constrained State-Feedback Control of Permanent Magnet Synchronous Machines for Automotive Applications**,** *39th Annual Conference of the IEEE Industrial-Electronics-Society* (IECON), Vienna, 3410-3415.
33. Copot C., Ionescu C. M., **Lazar C.**, et al., (2013). Fractional Order PD mu Control of a Visual Servoing Manipulator System**,** *European Control Conference* (ECC), Zurich, 4015-4020
34. Carpiuc S. C., **Lazar C.**, (2013). Low-Complexity Model Predictive Control of a Permanent Magnet Synchronous Machine System, *19th International Conference on Control Systems and Computer Science*(CSCS), Bucharest, 3-9
35. Carpiuc S. C., **Lazar C.**, (2013). Low-Computational-Complexity Algorithm for Current Predictive Control of an Externally Excited Synchronous Machine**,** *17th International Conference System Theory, Control and Computing* (ICSTCC), Sinaia, 103-108.
36. Maxim A., Ionescu C., Copot C., M., De Keyser R., **Lazar C.**,(2013). Multivariable Model-Based Control Strategies for Level Control in a Quadruple Tank Process**,** *17th International Conference System Theory, Control and Computing* (ICSTCC), Sinaia, 343-348.
37. Tiganasu A**., Lazar C.**, (2013). Singular Regions Detection in Fingerprint Images, *17th International Conference System Theory, Control and Computing* (ICSTCC), Sinaia, 2013,551-556.
38. Budaciu C., **Lazar C.**, (2012). Predictive Control Strategy in delta Domain for Damping Oscillations in a Driveline System , *17th IEEE International Conference on Emerging Technologies and Factory Automation* (ETFA), Krakow,September 17-21, 2012.
39. **Lazar C.,** Burlacu A., Copot C., (2012). Unified point and image moment features for image-based predictive visual servoing systems, Proceedings of the 13th International Conference on Optimization of Electrical and Electronic Equipment, Brasov, Vols 1-5 Pages: 1458-1464.

❖ *F2 Volume indexate BDI*

1. Baciu A., **Lazar C**. (2021). Data Driven Control for Swing-up and Stabilization of an Inverted Pendulum, *19th Mediterranian Conference on Control and Automation* (*MED)*, IEEE *Xplore**,*** Puglia, Italy, 22-25 June, 2021, pp. 1155-1160.
2. Baciu A., **Lazar C**. (2021). Position Control of a Mobile Inverted Pendulum System Using Model-Free Intelligent Controllers, *23rd Internațional Conference on Control Systems and Computer Science (CSCS),* IEEE *Xplore*, Bucharest, 26-28 May, 2021, pp. 15-20.
3. Costin M., **Lazar C**. (2021). Predictive Control of a Two-Input Two-Output Current System for Permanent Magnet Synchronous Machines, *25th Internațional Conference on Methods and Models in Automation and Robotics (MMAR)*, IEEE *Xplore*, Miedzyzdroje, Poland, 23-26 August, 2021, pp. 7-12.
4. Costin M., **Lazar C**. (2021). Predictive dq Current Control of an Induction Motor, *25th Internațional Conference on System Theory, Control and Computing (ICSTCC),* IEEE *Xplore*, Iasi, 20-23, October, 2021, pp. 637-642.

5. Baciu A., **Lazar C**., Caruntu C.F. (2021). Iterative Feedback Tuning of Model-Free Controllers, *25th Internațional Conference on System Theory, Control and Computing (ICSTCC),* IEEE *Xplore*, Iasi, 20-23 October, 2021, pp. 467-472.
6. Caruntu F.C. and **Lazar C.** (2012). Real-time networked predictive control of a vehicle drivetrain with backlash*, Proc. of 4th IFAC Conference on Nonlinear Model Predictive Control*, NMPC'12; Noordwijkerhout; Netherlands; August 23-27, 2012, (IFAC-PapersOnline) Volume 4, Issue PART 1, Pages 484-489
7. Burlacu A., **Lazar C.**, (2012). Constraint-based design and simulation of visual predictive architectures, *Proc.of 16th International Conference on System Theory, Control and Computing*, ICSTCC 2012; Sinaia; Romania; October 12-14, 2012, ISBN 978-606834848-3.
8. Caruntu C., **Lazar C.** (2012). Predictive compensation for network-induced time-varying delays, *Proc.of 16th International Conference on System Theory, Control and Computing*, ICSTCC 2012; Sinaia; Romania; October 12-14, 2012, ISBN 978-606834848-3.
9. Maxim A., **Lazar C.**, Burlacu A. and Copot C. (2012). Robotic visual servoing system based on SIFT features, *Proc.of 16th International Conference on System Theory, Control and Computing*, ICSTCC 2012; Sinaia; Romania; October 12-14, 2012, ISBN 978-606834848-3.
10. Copot C., Burlacu A. and **Lazar C**. (2012). Predictive control architecture for real-time image moments based servoing of robot manipulators, *Proc. of 14th IFAC Symposium on Information Control Problems in Manufacturing*, INCOM'12; Bucharest; May 23-25, 2012, (IFAC-PapersOnline), Volume 14, Issue PART 1, pp. 847-852

G. Contracte de cercetare/granturi

C. Lazar, membru - *Diagonal stability and flow invariance in system engineering. Techniques specialized for classes of dynamics, encompassed by a unified framework*, 2011-2014, PN-II-ID-PCE-2011-3-1038, UEFISCDI (director – Pastravanu O.).

H. 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*.