

Universitatea Tehnică din Cluj-Napoca

Facultatea Automatica si Calculatoare

Departamentul Automatica

LISTĂ LUCRĂRI

Candidat: Conf. Dr. Ing. Cristina Ioana Muresan

Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii, care sunt incluse în format electronic în dosar și care se pot regăsi și în celelalte categorii de lucrări

1. **C. I. Muresan**, I. Birs, R. De Keyser (2021), An alternative design approach for Fractional Order Internal Model Controllers for time delay systems, *Journal of Advanced Research*, vol. 31, pp. 177-189, DOI: 10.1016/j.jare.2021.01.004
2. **Muresan, Cristina I.**; Birs, Isabela R.; Dulf, Eva H. (2020) Event-Based Implementation of Fractional Order IMC Controllers for Simple FOPDT Processes, *Mathematics*, 8(8), 1378, doi: 10.3390/math8081378
3. De Keyser, R., **Muresan, C.I.**, Ionescu, C.M. (2018), An efficient algorithm for low-order discrete-time implementation of fractional order transfer functions, *ISA Transactions*, vol. 74, pp. 229-238, DOI: 10.1016/j.isatra.2018.01.026
4. **Muresan, C.I.**, Folea, S.C., Birs, I.R., Ionescu, C.M. (2018), A Novel Fractional Order Model and Controller for Vibration Suppression in Flexible Smart Beam, *Nonlinear Dynamics*, vol. 93, no. 2, pp. 525-541, DOI: 10.1007/s11071-018-4207-0
5. De Keyser, R., **Muresan, C.I.**, Ionescu, C. (2016), A Novel Auto-tuning Method for Fractional Order PI/PD Controllers, *ISA Transactions*, Vol. 62, pp. 268-275, DOI: 10.1016/j.isatra.2016.01.021

A – Teza de doctorat

Pop, C.I., Contribuții la teoria sistemelor robuste neliniare cu aplicații la conducerea coloanelor de separări izotopice, Universitatea Tehnică din Cluj-Napoca, conducator stiintific Prof. Dr. Ing. Clement Festila, titlul acordat prin ordinul MECTS din 7.12.2011

B – Cărți și capitole în cărți

B1. CĂRȚI

1. C. Copot, C.M. Ionescu, **C.I. Muresan** (2020), Image-Based and Fractional-Order Control for Mechatronic Systems. Theory and Applications with MATLAB®, ISBN

978-3-03-042005-5, 978-3-03-042006-2, DOI: 10.1007/978-3-030-42006-2, Springer (book)

B2. CAPITOLE DE CARTE

1. **Pop, C.-I.**, Dulf, E.H (2011), *Robust Feedback Linearization Control for Reference Tracking and Disturbance Rejection in Nonlinear Systems*, invited chapter in Recent Advances in Robust Control – Novel Approaches and Design Methods, ISBN: 978-953-307-561-7, pp. 273-290, InTech Open Access Publisher, Croatia (**Book Chapter**)
2. **Muresan, C.I.** (2014), Fractional Calculus: From Simple Control Solutions to Complex Implementation Issues, chapter in Machado, J.A.T., Baleanu, D., Luo, A. (eds) “Discontinuity and Complexity in Nonlinear Physical Systems”, Nonlinear Systems and Complexity Volume 6, pp. 113-134, ISBN: 978-3-319-01410-4, ISSN: 2195-9994, DOI:10.1007/978-3-319-01411-1__7, Springer, Switzerland (**Book Chapter**)
3. Ionescu, C.M., Copot, D., **Muresan, C.I.** (2019), A multi-scale model of nociception pathways and pain mechanisms, chapter in Baleanu, D., Lopes, A.M. (eds.) „Handbook Of Fractional Calculus With Applications. Volume 7: Applications In Engineering, Life And Social Sciences, Part A”, pp. 55-68, DOI:10.1515/9783110571905-004 (**Book Chapter**)
4. **C.I. Muresan**, R. De Keyser, I. R. Birs, S. Folea, O. Prodan (2019) An Autotuning Method for a Fractional Order PD Controller for Vibration Suppression, chapter in K. Taş, D. Baleanu, J.A. Tenreiro Machado (eds.) “Mathematical Methods in Engineering. Nonlinear Systems and Complexity”, vol. 24, pp. 245-256, DOI: https://doi.org/10.1007/978-3-319-90972-1_15 (**Book Chapter**)
5. E.H. Dulf, **C.I. Muresan**, C. Ionescu (2019) Fault Tolerant Control of the 13C Isotope Separation Cascade, chapter in K. Taş, D. Baleanu, J.A. Tenreiro Machado (eds.) “Mathematical Methods in Engineering. Nonlinear Systems and Complexity”, vol. 24, pp. 53-65, DOI: https://doi.org/10.1007/978-3-319-90972-1_4 (**Book Chapter**)
6. **Muresan, C.I.**, Copot, D. (2019), Chapter 4 - Information From Time-Based Signals, chapter in Ionescu, C., Lung Function Testing in the 21st Century. Methodologies and Tools Bridging Engineering to Clinical Practice, pp. 109-123, 10.1016/B978-0-12-814612-5.00006-3, ISBN 978-0-12-814612-5, Elsevier (**Book Chapter**)
7. Birs. I., **Muresan, C.I.** (2020), A non-Newtonian impedance measurement experimental framework: modeling and control inside blood-like environments—fractional-order modeling and control of a targeted drug delivery prototype with impedance measurement capabilities, chapter in Copot, D. “Automated Drug Delivery in Anesthesia”, ISSN:978-0-12-815975-0, DOI: 10.1016/B978-0-12-815975-0.00008-4, Elsevier (**Book chapter**)

C – Articole in reviste din fluxul științific internațional

C1. Articole în reviste de specialitate de circulație internațională cotate ISI

1. **Pop, C.-I.**, Dulf, E.-H. (2010), Control Strategies of the 13C Cryogenic Separation Column, *Control Engineering and Applied Informatics*, Vol. 12, No. 2, ISSN 1454-8658, pp.36-43, June 2010 (**ISI no impact factor**)

2. **Pop, C.-I.**, Festila, Cl., Dulf, E.-H. (2010), Optimal Control of The Carbon Isotopes Cryogenic Separation Process, *Chemical and Biochemical Engineering Quarterly*, Issue 24, No. 3, ISSN 0352-9568, pp.301-307. **(ISI impact factor 0.483)**
3. **Pop, C.-I.**, Festila, Cl., Dulf, E.-H., Gligan, M. (2012), Tracking and Disturbance Rejection in the ¹³C Cryogenic Separation Column, *Control Engineering and Applied Informatics*, vol. 14, no.1, pp.48-57**(ISI – factor impact 0.202)**
4. Dulf, E.H., **Pop, C.I.**, Dulf, F. (2012), Systematic Modeling of the (¹³C) Isotope Cryogenic Distillation Process, *Separation Science and Technology*, vol. 47(8), pp. 1234-1240 DOI:10.1080/01496395.2011.644614 **(ISI – factor de impact 1.164)**
5. Dulf, E.-H., **Pop, C.-I.**, Dulf, F.-V. (2012), Fractional Calculus in ¹³C Separation Column Control, *Signal, Image and Video Processing*, vol. 6, no. 3, pp.479-485, DOI: 10.1007/s11760-012-0335-z **(ISI – factor de impact 0.409)**
6. **Pop, C.-I.**, Ionescu, C., De Keyser, R., Dulf, E.-H. (2012), Robustness evaluation of Fractional Order Control for Varying Time Delay Processes, *Signal, Image and Video Processing*, vol. 6, no. 3, pp.453-461, DOI: 10.1007/s11760-012-0322-4 **(ISI, factor de impact 0.409)**
7. **Pop, C.-I.**, Ionescu, C. M., De Keyser, R. (2012), Time delay compensation for the secondary processes in a multivariable carbon isotope separation unit, *Chemical Engineering Science*, vol. 80, pp. 205-218, DOI: 10.1016/j.ces.2012.06.043 **(ISI – factor de impact 2.386)**
8. **Muresan, C.I.**, Folea, S., Mois, G., Dulf, E.H. (2013), Development and Implementation of an FPGA Based Fractional Order Controller for a DC Motor, *Elsevier Journal of Mechatronics*, vol. 23, no. 7, pp. 798-804 **(ISI impact factor 1.823)**
9. Dulf, E.-H., **Muresan, C.I.**, Unguresan, M. L. (2014), Modeling the (¹⁵N) Isotope Separation Column, *Journal of Mathematical Chemistry*, Vol. 52, No.1, pp. 115-131, DOI: 10.1007/s10910-013-0248-2 **(ISI impact factor 1.145)**
10. **Muresan, C.I.**, Dulf, E.H., Both, R. (2015), Comparative analysis of different control strategies for a train of cryogenic ¹³C separation columns, *Chemical Engineering and Technology*, vol. 38, no. 4, pp. 619-631, DOI: 10.1002/ceat.201400550 **(ISI impact factor 2.442)**
11. **Muresan, C.I.**, Ionescu, C., Folea, S., De Keyser, R. (2015), Fractional Order Control of Unstable Processes: The Magnetic Levitation Study Case, *Journal of Nonlinear Dynamics*, Vol. 80, No. 4, pp. 1761-1772, DOI: 10.1007/s11071-014-1335-z **(ISI impact factor 3.000)**
12. Dulf, E.-H., Dulf, F.V., **Muresan, C.I.** (2015), Fractional Model of the Cryogenic (¹³C) Isotope Separation Column, *Chemical Engineering Communications*, Vol. 202, No. 12, pp. 1600-1606, DOI:10.1080/00986445.2014.968709 **(ISI impact factor 1.433)**
13. Ionescu, C., **Muresan, C.I.** (2015), Sliding mode control for a class of Sub-systems with fractional order varying trajectory dynamics, *Fractional Calculus and Applied Analysis*, Vol. 18, No. 6, pp. 1441-1451, DOI: 10.1515/fca-2015-0083, **(ISI impact factor 2.246)**
14. **Muresan, C.I.**, Dutta, A., Dulf, E.H., Pinar, Z., Maxim, A., Ionescu, C.M. (2016), Tuning algorithms for fractional order internal model controllers for time delay

- processes, *International Journal of Control*, Vol. 89, No. 3, pp. 579-593, DOI: 10.1080/00207179.2015.1086027 (**ISI impact factor 2.208**)
15. Folea, S., **Muresan, C.I.**, De Keyser, R., Ionescu, C. (2016), Theoretical Analysis and Experimental Validation of a Simplified Fractional Order Controller for a Magnetic Levitation System, *IEEE Transactions on Control Systems Technology*, vol. 24, no. 2, pp. 756 – 763, DOI: 10.1109/TCST.2015.2446496 (**ISI impact factor 3.882**)
 16. **Muresan, C.I.**, Dulf, E.H., Both, R. (2016), Vector Based Tuning and Experimental Validation of Fractional Order PI/PD Controllers, *Journal of Nonlinear Dynamics*, DOI: 10.1007/s11071-015-2328-2, Vol. 84, No. 1, pp. 179-188 (**ISI impact factor 3.464**)
 17. De Keyser, R., **Muresan, C.I.**, Ionescu, C. (2016), A Novel Auto-tuning Method for Fractional Order PI/PD Controllers, *ISA Transactions*, Vol. 62, pp. 268-275, DOI: 10.1016/j.isatra.2016.01.021 (**ISI impact factor 3.394**)
 18. Folea, S., Mois, G., **Muresan, C.I.**, Miclea, L., De Keyser, R., Cirstea, M. (2016), A Portable Implementation on Industrial Devices of a Predictive Controller using Graphical Programming, *IEEE Transactions On Industrial Informatics*, Vol. 12, No. 2, pp. 1-9, ISSN: 1551-3203, DOI: 10.1109/TII.2016.2532118 (**ISI impact factor 6.764**)
 19. Harja, G., Nascu, I., **Muresan, C.I.**, Nascu, I. (2016) Improvements in dissolved oxygen control of an activated sludge wastewater treatment process, *Circuits, Systems & Signal Processing*, Vol. 35, No. 6, pp. 2259-2281, DOI: 10.1007/s00034-016-0282-y (**ISI impact factor 1.694**)
 20. **Muresan, C.I.**, Dulf, E.H., Prodan, O. (2016), A Fractional Order Controller For Seismic Mitigation Of Structures Equipped With Viscoelastic Mass Dampers, *Journal of Vibration and Control*, DOI:10.1177/1077546314557553, Vol. 22, no. 8, pp. 1980-1992 (**ISI impact factor 2.101**)
 21. **Muresan, C.I.**, Dulf, E.H., Copot, C., De Keyser, R., Ionescu, C.M. (2016), Design and analysis of a multivariable fractional order controller for a non-minimum phase system, DOI: 10.1177/1077546315575433, *Journal of Vibration and Control*, Vol. 22 no. 9, pp. 2187-2195 (**ISI impact factor 2.101**)
 22. Dulf, E.H., Timis, D., **Muresan, C.I.** (2017), Robust Fractional Order Controllers for Distributed Systems, *Acta Polytechnica Hungarica*, vol. 14, no. 1, pp. 163-176, DOI: 10.12700/APH.14.1.2017.1.11 (**ISI impact factor 0.745**)
 23. Folea, S., De Keyser, R., Birs, I.R., **Muresan, C.I.**, Ionescu, C.I. (2017), Discrete-Time Implementation and Experimental Validation of a Fractional Order PD Controller for Vibration Suppression in Airplane Wings, *Acta Polytechnica Hungarica*, vol. 14, no. 1, pp. 191-206, DOI: 10.12700/APH.14.1.2017.1.13 (**ISI impact factor 0.745**)
 24. De Keyser, R., **Muresan, C.I.**, Ionescu, C.M. (2018), An efficient algorithm for low-order discrete-time implementation of fractional order transfer functions, *ISA Transactions*, vol. 74, pp. 229-238, DOI: 10.1016/j.isatra.2018.01.026 (**ISI Impact factor 4.343**)
 25. **Muresan, C.I.**, Folea, S.C., Birs, I.R., Ionescu, C.M. (2018), A Novel Fractional Order Model and Controller for Vibration Suppression in Flexible Smart Beam, *Nonlinear Dynamics*, vol. 93, no. 2, pp. 525-541, DOI: 10.1007/s11071-018-4207-0 (**ISI impact factor 4.604**)

26. **Muresan, C.I.**, Copot, C., Birs, I.R., De Keyser, R., Vanlanduit, S., Ionescu, C. (2018), Experimental validation of a novel auto-tuning method for a fractional order PI controller on an UR10 robot, *Algorithms*, vol. 11(7), pp. 95, DOI: 10.3390/a11070095 (**ISI Emerging citations Index**)
27. Copot, C., **Muresan, C.I.**, Ionescu, C., Vanlanduit, S., De Keyser, R. (2018), Calibration of UR10 robot controller through simple auto-tuning approach, *Robotics*, vol. 7(3), pp. 35, DOI: 10.3390/robotics7030035 (**ISI Emerging citations Index**)
28. Markowski, K., Birs, I.R., **Muresan, C.I.**, Prodan, O. (2018), Different fractional order models for an experimental smart beam system, *Bulletin Of The Polish Academy Of Sciences-Technical Sciences*, Vol. 66, no. 4, pp. 485-493, DOI: 10.24425/124265 (**ISI impact factor 1.361**)
29. **Muresan, C.I.**, Ionescu, C., Dulf, E.H., Rusu-Both, R., Folea, S.(2018), Advantage of low-cost predictive control: study case on a train of distillation columns, *Journal of Chemical Engineering and Technology*, vol. 41, no. 10, pp. 1936-1948, DOI: 10.1002/ceat.201700529 (**ISI impact factor 2.418**)
30. **Muresan, C.I.**, Birs, I.R., Folea, S., Ionescu, C. (2018), Fractional order based velocity control system for a nanorobot in non-Newtonian fluids, *Bulletin Of The Polish Academy Of Sciences-Technical Sciences*, Vol. 66, No. 6, pp. 991-997, DOI: 10.24425/bpas.2018.125946 (**ISI impact factor 1.361**)
31. Birs, I., **Muresan, C.I.**, Nascu, I., Ionescu, C. (2019), A Survey of Recent Advances in Fractional Order Control for Time Delay Systems, *IEEE Access*, vol. 7, no. 1, pp. 30951-30965, DOI: 10.1109/ACCESS.2019.2902567 (**ISI impact factor 4.098**)
32. **Muresan, C.I.**, Birs, I.R., Ionescu, C., De Keyser, R. (2019), Tuning of fractional order proportional integral/proportional derivative controllers based on existence conditions, *Proc IMechE Part I: J Systems and Control Engineering*, vol. 223, no. 4, pp. 384-391, DOI: 10.1177/0959651818790809 (**ISI Impact factor 1.166**)
33. De Keyser, R., **Muresan, C.I.**, Ionescu, C. (2019), Universal Direct Tuner for Loop Control in Industry, *IEEE Access*, vol. 7, pp. no. 1, pp. 81308-81320, DOI: 10.1109/ACCESS.2019.2921870 (**ISI impact factor 4.098**)
34. Birs, I., Copot, D., **Muresan, C.I.**, Nascu, I., Ionescu, C. (2019), Identification For Control Of Suspended Objects In Non-Newtonian Fluids, *Fractional Calculus and Applied Analysis*, vol. 22, no.5, pp. 1378-1394 , DOI: 10.1515/fca-2019-0072 (**ISI impact factor 3.514**)
35. Juchem, J., **Muresan, C.I.**, De Keyser, R., Ionescu, C.M. (2019), Robust fractional-order auto-tuning for highly-coupled MIMO systems, *Heliyon*, Vol. 5, No. 7, paper e02154, DOI: 10.1016/j.heliyon.2019.e02154 (**ISI Emerging citations Index**)
36. I. Birs, S. Folea, O. Prodan, E. Dulf, C. Muresan (2020), An experimental tuning approach of fractional order controllers in the frequency domain, *Applied Sciences*, vol. 10(9), pp. 2379 (**ISI impact factor 2.474**)
37. Eva-H. Dulf, Dan C. Vodnar, Alex Danku, **Cristina-I. Muresan**, Ovidiu Crisan (2020), Fractional-Order Models for Biochemical Processes, *Fractal and Fractional*, 4(2), 12, doi: 10.3390/fractalfract4020012 (**ISI impact factor 3.313**)
38. C. Ionescu, I. Birs, D. Copot, **C. Muresan**, R. Caponetto (2020), Mathematical modeling with experimental validation of viscoelastic properties in non-

- Newtonian fluids, *Philosophical Transactions of The Royals Society A*, A 20190284, doi:10.1098/rsta.2019.0284 (**ISI impact factor 3.275**)
39. C.M. Ionescu, E.H. Dulf, M. Ghita, C.I. Muresan (2020), Robust Controller Design: Recent Emerging Concepts for Control of Mechatronic Systems, *Journal of the Franklin Institute*, DOI: 10.1016/j.jfranklin.2020.05.046, Vol. 357, No. 12, pp. 7818-7844 (**ISI impact factor 4.036**)
 40. I. Birs, I. Nascu, C. Ionescu, C. Muresan (2020), Event-based fractional order PID control, *Journal of Advanced Research*, Volume 25, pp.191-203, DOI: 10.1016/j.jare.2020.06.024 (**ISI impact factor 6.992**)
 41. Muresan, C.I.; Ionescu, C.M. (2020) Generalization of the FOPDT Model for Identification and Control Purposes, *Processes*, 8, 682, doi: 10.3390/pr8060682 (**ISI impact factor 2.753**)
 42. Muresan, Cristina I.; Birs, Isabela R.; Dulf, Eva H. (2020) Event-Based Implementation of Fractional Order IMC Controllers for Simple FOPDT Processes, *Mathematics*, 8(8), 1378, doi: 10.3390/math8081378 (**ISI impact factor 1.747**)
 43. EH Dulf, M Saila, CI Muresan, LC Miclea (2020), An Efficient Design and Implementation of a Quadrotor Unmanned Aerial Vehicle Using Quaternion-Based Estimator, *Mathematics*, vol 8, No. 10, 1829; DOI: 10.3390/math8101829, (**ISI impact factor 1.747**)
 44. M. Ghita, M. Neckebroek, C. Muresan, D. Copot (2020), Closed-Loop Control of Anesthesia: Survey on Actual Trends, Challenges and Perspectives," in *IEEE Access*, vol. 8, pp. 206264-206279, 2020, doi: 10.1109/ACCESS.2020.3037725 (**ISI impact factor 3.745**)
 45. R. A. C. Diaz, M. Ghita, D. Copot, I. R. Birs, C. Muresan and C. Ionescu (2020), Context Aware Control Systems: An Engineering Applications Perspective, *IEEE Access*, vol. 8, pp. 215550-215569, doi: 10.1109/ACCESS.2020.3041357 (**ISI impact factor 3.745**)
 46. Ghita, M.; Neckebroek, M.; Juchem, J.; Copot, D.; Muresan, C.I.; Ionescu, C.M. (2020), Bioimpedance Sensor and Methodology for Acute Pain Monitoring, *Sensors*, 20, 6765, Doi: 10.3390/s20236765 (**ISI impact factor 3.275**)
 47. C. I. Muresan, I. Birs, R. De Keyser (2021), An alternative design approach for Fractional Order Internal Model Controllers for time delay systems, *Journal of Advanced Research*, vol. 31, pp. 177-189, DOI: 10.1016/j.jare.2021.01.004 (**ISI impact factor 10.479**)
 48. Copot, C.; Muresan, C.I.; Beschi, M.; Ionescu, C.M. (2021) A 6DOF Virtual Environment Space Docking Operation with Human Supervision. *Appl. Sci.*, vol. 11, 3658, DOI: 10.3390/app11083658 (**ISI impact factor 2.679**)
 49. Muresan, Cristina I., Isabela R. Birs, Eva H. Dulf, Dana Copot, and Liviu Miclea (2021), "A Review of Recent Advances in Fractional-Order Sensing and Filtering Techniques", *Sensors*, 21, no. 17: 5920, DOI:10.3390/s21175920 (**ISI impact factor 3.576**)
 50. Birs, Isabela, Cristina Muresan, Ovidiu Prodan, Silviu Folea, and Clara Ionescu (2021), "An Experimental Approach towards Motion Modeling and Control of a Vehicle Transiting a Non-Newtonian Environment, *Fractal and Fractional* , 5, no. 3: 104, DOI: 10.3390/fractalfract5030104 (**ISI impact factor 3.313**)

51. **C. Muresan**, R. De Keyser (2022), Revisiting Ziegler-Nichols. A fractional order approach, *ISA Transactions*, Doi:10.1016/j.isatra.2022.01.017 (**ISI impact factor 5.468**)
52. **Muresan, Cristina I.**, Isabela Birs, Clara Ionescu, Eva H. Dulf, and Robin De Keyser, (2022), A Review of Recent Developments in Autotuning Methods for Fractional-Order Controllers, *Fractal and Fractional*, vol. 6, no. 1: 37, DOI: [10.3390/fractalfract6010037](https://doi.org/10.3390/fractalfract6010037) (**ISI impact factor 3.313**)
53. Timis DD, **Muresan CI**, Dulf E-H (2022), Design and Experimental Results of an Adaptive Fractional-Order Controller for a Quadrotor, *Fractal and Fractional*, vol. 6, no. 4:204, DOI: 10.3390/fractalfract6040204 (**ISI impact factor 3.313**)
54. Mihaela Ghita, Isabela R. Birs, Dana Copot, **Cristina I. Muresan** and Clara M. Ionescu (2022), Bioelectrical Impedance Analysis of Thermal-Induced Cutaneous Nociception, *IEEE Transactions on Biomedical Engineering*, under review
55. **Cristina I. Muresan**, Iulia Bunescu, Isabela Birs, Robin De Keyser (2022), A Novel Toolbox for Automatic Design of Fractional Order PI Controllers based on Automatic System Identification from Step Response Data, *Asian Journal of Control*, under review
56. **Cristina I. Muresan**, Isabela R. Birs, Dana Copot, Eva H. Dulf, Clara M. Ionescu, Fractional Order PI Controller Design based on Reference to Disturbance Ratio (2022), *Fractal and Fractional*, under review
57. Isabela Birs, **Cristina Muresan**, Dana Copot, and Clara Ionescu (2022), Model Identification and Control of Electromagnetic Actuation in Continuous Casting Process with Improved Quality, *Acta Sinica*, under review

C2. Articole în reviste de specialitate de circulație internațională cotate BDI

1. **Muresan, C.I.** (2013), Simplified Optimization Routine for Tuning Robust Fractional Order Controllers, *American Journal of Computational Mathematics*, ISSN: 2161-1203, vol. 3, no. 3B, pp. 7-12, DOI: 10.4236/ajcm.2013.33B002, paper selected at the Engii Workshop, Beijing, China, 12-14 august 2013
2. **Muresan, C.I.**, Dulf, E.H., Ionescu, C. (2014), Robustness Evaluation of a Multivariable Fractional Order PI Controller for Processes with Multiple Time Delays, *Journal of Control and Intelligent Systems*, ActaPress, Vol. 42, No. 2, pp. 112-118, DOI: 10.2316/Journal.201.2014.2.201-2507, March 2014
3. **Muresan, C.I.**, Prodan, O., Folea, S. (2014), Tuning Method of Fractional Order Controllers for Vibration Suppression in Smart Structures, *Applied Mechanics and Materials Journal*, Vol. 598, pp. 534-538, paper selected at the 4th International Conference on Mechanics, Simulation and Control, DOI: 10.4028/www.scientific.net/AMM.598.534, 21-22 June, Moscow, Russia
4. Birs, I.R., **Muresan, C.I.**, Folea, S., Prodan, O. (2016), A Comparison between Integer and Fractional Order PD μ Controllers for Vibration Suppression, *Applied Mathematics and Nonlinear Sciences*, Vol. 1, No. 1, pp. 273-282, DOI:10.21042/AMNS.2016.1.00022
5. Prodan, O., Birs, I.R., Folea, S., **Muresan, C. I.** (2016), Seismic Mitigation in Civil Structures Using a Fractional Order PD Controller, *International Journal of Structural and Civil Engineering Research*, Vol. 5, No. 2, pp. 93-96, May 2016. DOI: 10.18178/ijscer.5.2.93-96

6. **Muresan, C.I.**, Tenreiro Machado, J.A., Ortigueira, M.D. (2017), Editorial special issue: "Dynamics and Control of Fractional Order Systems", *International Journal of Dynamics and Control*, vol. 5, no. 1, pp. 1-3, DOI: 10.1007/s40435-016-0251-0
7. **Muresan, C.I.**, Ostalczyk, P., Ortigueira, M.D. (2017), Editorial special issue on "Fractional Calculus Applications in Modeling and Design of Control Systems", *Journal of Applied Nonlinear Dynamics*, vol. 6(2), pp. 131-134, DOI: 10.5890/JAND.2017.06.001

D – Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate

D1. Articole cotate ISI

1. **Pop, C.-I.**, Dulf, E.-H., Festila, Cl. (2008), Estimator based Flooding Predictor for (¹³C) Cryogenic Separation Column, *International IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2008 (THETA 16)*, ISBN: 978-1-4244-2577-8, IEEE Catalog Number: CFP08AQCDR, Library of Congress: 2008904446, pp.207-211, 22-25 mai 2008, Cluj-Napoca (**ISI PRO**)
2. Festila, Cl., **Pop, C.-I.**, Dulf, E.-H., Baldea, A., Gligan, M. (2008), Flooding Process Analysis by ¹³C Cryogenic Separation Column, *International IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2008 (THETA 16)*, ISBN: 978-1-4244-2577-8, IEEE Catalog Number: CFP08AQCDR, Library of Congress: 2008904446, pp.96-100, 22-25 mai 2008, Cluj-Napoca (**ISI PRO**)
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Semnatura

