

Technical University of Cluj-Napoca
Faculty of Automation and Computer Science

Department of Automation

LIST OF PUBLICATIONS

Candidate: Cristina Ioana Muresan, PhD

The list of the maximum 10 reserach papers considered by the candidate to be the most relevant for his / her professional achievements, which are included in electronic format in the file and which can be found in the other categories

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 – Doctoral Thesis

Pop, C.I., Contributions to nonlinear robust systems theory with applications in the control of isotope separation columns, Tehnical University of Cluj-Napoca, supervisor Prof. Dr. Ing. Clement Festila, title awarded by MECTS in 7.12.2011.

B – Books and book chapters

B1. Books

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. Book Chapters

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 – Articles in international journals

C1. WoS Journals

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 ^{13}C 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 (^{13}C) 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 ^{13}C 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 (^{15}N) 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 ^{13}C 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 (^{13}C) 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 Emerging citations Index**)
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), Revisting 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. BDI Journals

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",

D – Articles in international conferences

D1. WoS conferences

1. **Pop, C.-I.**, Dulf, E.-H., Festila, Cl. (2008), Estimator based Flooding Predictor for (^{13}C) 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 ^{13}C 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**)
3. Dulf, E.-H., **Pop, C.-I.**, Feștilă, Cl., Dulf, F. (2009), Robust Feedback Linearization Applied to a Separation Column for ^{13}C , *American Institute of Physics Proceedings* no. 1107 33 (2009), DOI: 10.1063/1.3106498 (**ISI PRO**)
4. Festila, Cl., **Pop, C.-I.**, Dulf, E.-H. (2010), Synchronous Rectification Applied in a Transfer Function Analyzer, *International IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2010 (THETA 17)*, ISBN: 978-1-4244-6724-2, pp.121-125, 28-30 mai 2010, Cluj-Napoca (**ISI PRO**)
5. **Pop, C.-I.**, Dulf, E.-H., Festila, Cl., Muresan, B. (2010), Feedback Linearization Control Design for the ^{13}C Cryogenic Separation Column, *International IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2010 (THETA 17)*, ISBN: 978-1-4244-6724-2, IEEE Catalog Number: CFP10AQT-PRT, vol. I, pp. 157-163, 28-30 mai 2010, Cluj-Napoca (**ISI PRO**)
6. **Pop, C.-I.**, Ionescu, C.M, De Keyser, R., Dulf, E.-H., Valean, H., Neaga, A., Darab, C. (2012), An Alternative EPSAC Based Control Strategy for Multivariable Time Delay Processes, *International IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2012 (THETA 18)*, IEEE Catalog Number: CFP12AQT-CDR, ISBN: 978-1-4673-0703-1, pp. 150-155, 24-27 mai 2012, Cluj-Napoca (**ISI PRO**)
7. **Muresan, C.I.**, Both, R., Dulf, E.H., Neaga, A., Ionescu, C. (2013), HIL Real-Time Simulation of a Digital Fractional Order PI Controller for Time Delay Processes, *IEEE Africon*, ISBN: 978-1-4673-5940-5, ISSN: 2153-0025, DOI: 10.1109/AFRCON.2013.6757603, pp. 1-5, 9-12 September, Mauritius (**ISI PRO**)
8. **Muresan, C.I.**, Dulf, E.H., Both, R., Palfi, A., Caprioru, M. (2013), Microcontroller Implementation of a Multivariable Fractional Order PI Controller, *The 9th International Conference on Control Systems and Computer Science (CSCS19-2013)*,

- IEEE Catalog Number E4980, ISBN: 978-0-7685-4980-4, DOI: 10.1109/CSCS.2013.9, pp. 44-51, 29-31 May, Bucharest, Romania (**ISI PRO**)
9. Both, R., **Muresan, C.I.**, Dulf, E.H., Dulf, F.V. (2013), Microcontroller Implementation of Digital Fractional Order Controllers for Time Delay Processes, *The 21st Mediterranean Conference on Control and Automation*, ISBN: 978-1-4799-0995-7, DOI: 10.1109/MED.2013.6608911, pp. 1445-1450, 25-28 June, Platanias-Chania, Crete, Greece (**ISI PRO**)
 10. **Muresan, C.I.**, Folea, S., Mois, G. (2013), Optimal Implementation of Advanced Control Methods on FPGA Targets, *The 10th IEEE RIVF International Conference on Computing and Communication Technologies*, ISBN: 978-1-4799-1350-3, pp. 209-214, 10-13 November, Hanoi, Vietnam (**ISI PRO**)
 11. **Muresan, C.I.**, Mois, G., Folea, S., Ionescu, C. (2013), Alternative Implementations of a Fractional Order Control Algorithm on FPGAs, International Conference on Reconfigurable Computing and FPGAs (ReConFig), ISBN: 978-1-4799-2078-5, DOI: 10.1109/ReConFig.2013.6732269, pp. 1-6, 9-11 December, Cancun, Mexico (**ISI PRO**)
 12. **Muresan, C.I.**, Prodan, O. (2014), Vibration Suppression in Smart Structures using Fractional Order PD controllers, IEEE International Conference on Automation, Quality and Testing, Robotics AQTR, ISBN: 978-1-4799-3731-8, pp. 1-5, DOI: 10.1109/AQTR.2014.6857907, 22-24 May, Cluj-Napoca, Romania (**ISI PRO**)
 8. Dulf, E.H., Both, R., **Muresan, C.I.** (2014), Active Disturbance Rejection Controller for a Separation Column, IEEE International Conference on Automation, Quality and Testing, Robotics AQTR, ISBN: 978-1-4799-3731-8, pp. 1-6, DOI: 10.1109/AQTR.2014.6857906, 22-24 May, Cluj-Napoca, Romania (**ISI PRO**)
 9. Copot, C., **Muresan, C.I.**, Ionescu, C.M., De Keyser, R. (2014), Fractional Order Control of a DC Motor with Load Changes, 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM, pp. 956-961, DOI: 10.1109/OPTIM.2014.6850964, May 22-24, Bran, Romania (**ISI PRO**)
 10. Both, R., Dulf, E.H., **Muresan, C.I.** (2015) Active Disturbance Rejection Controller for Chemical Reactor, 12th International Conference of Numerical Analysis and Applied Mathematics, AIP Conf. Proc. 1648, <http://dx.doi.org/10.1063/1.4913166> Rhodes, Greece, 22-28 September 2014 (**ISI PRO**)
 11. **Muresan, C.I.**, Dulf, E.H. (2015), Fractional Order IMC based Controller for Time Delay Systems, 12th International Conference of Numerical Analysis and Applied Mathematics, AIP Conf. Proc. 1648, <http://dx.doi.org/10.1063/1.4913154> Rhodes, Greece, 22-28 September 2014 (**ISI PRO**)
 12. Folea, S., Mois, G., **Muresan, C.I.**, Miclea, L., De Keyser, R., Cirstea, M. (2015) Implementation of an Extended Prediction Self-Adaptive Controller using LabVIEW™, *13th IEEE International Conference on Industrial Informatics*, pp. 883-888, DOI: 10.1109/INDIN.2015.7281852, Cambridge, UK, 22-24 July 2015 (**ISI PRO**)
 13. Both, R., Dulf, E.H., **Muresan, C.I.**, Secara, M. (2015), Fractional order PD control of an isotope separation columns cascade, *IEEE 10th Jubilee International Symposium on Applied Computational Intelligence and Informatics (SACI 2015)*,

pp.193-196, DOI: 10.1109/SACI.2015.7208197, Timisoara, Romania, 21-23 May 2015 (**ISI PRO**)

14. Harja, G., **Muresan, C.I.**, Nascu, I., Vlad, G. (2015), Fractional order PI control strategy on an activated sludge wastewater treatment process, *The 19th International Conference on System Theory, Control and Computing Joint Conference SINTES 19, SACCS 15, SIMSIS 19*, pp. 577-582, DOI: 10.1109/ICSTCC.2015.7321355, October 14 - 16, Cheile Gradistei - Fundata Resort, Romania (**ISI PRO**)
15. Dulf, E.H., **Muresan, C.I.**, Both, R., Fustos, C. (2015) Auto-tuning Fractional Order Velocity Control of a DC Motor, *2015 Intl Aegean Conference on Electrical Machines & Power Electronics (ACEMP), 2015 Intl Conference on Optimization of Electrical & Electronic Equipment (OPTIM) & 2015 Intl Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION)*, pp. 159 - 162, DOI: 10.1109/OPTIM.2015.7427022, Side, Turkey, 2- 4 September 2015 (**ISI PRO**)
16. Ionescu, C., **Muresan, C.I.**, Copot, D., De Keyser, R., (2016) Constrained Multivariable Predictive Control of a Train of Cryogenic ^{13}C Separation Columns, *11th IFAC Symposium on Dynamics and Control of Process Systems (DYCOPS)*, IFAC-Papers OnLine Elsevier, Vol. 49, No. 7, pp. 1103-1108, doi:10.1016/j.ifacol.2016.07.350, Trondheim, Norway, June 6-8, 2016 (**ISI PRO**)
17. **Muresan, C.I.**, De Keyser, R., Ionescu, C., (2016) Autotuning Method for a Fractional Order Controller for a Multivariable ^{13}C Isotope Separation Column, *15th European Control Conference (ECC16)*, DOI: 10.1109/ECC.2016.7810311, pp. 358-363, ISBN: 978-1-5090-2590-9, Aalborg, Denmark, June 29 - July 1, 2016 (**ISI PRO**)
18. **Muresan, C.I.**, Folea, S., Prodan, O., Eva H. Dulf, (2016) Design and Experimental Validation of an Optimal Fractional Order Controller for Vibration Suppression, *The International Conference on Control, Decision and Information Technologies*, pp. 129-133, DOI: 10.1109/CoDIT.2016.7593548, Malta, April 6-8, 2016 (**ISI PRO**)
19. Copot, D., **Muresan, C.I.**, De Keyser, R., Ionescu, C., Fractional order modeling of diffusion processes: a new approach for glucose concentration estimation, *IEEE International Conference on Automation, Quality and Testing, Robotics AQTR*, DOI: 10.1109/AQTR.2016.7501364, Cluj-Napoca, Romania, 19-21 May 2016 (**ISI PRO**)
20. Birs, I.R., **Muresan, C.I.**, Folea, S., Prodan, O., Kovacs, L., Vibration suppression with fractional-order $\text{PI}^\lambda\text{D}^\mu$ controller, *IEEE International Conference on Automation, Quality and Testing, Robotics AQTR*, pp. 413-418, DOI: 10.1109/AQTR.2016.7501365, Cluj-Napoca, Romania, 19-21 May 2016 (**ISI PRO**)
21. **Muresan, C.I.**, Birs, I.R., Folea, S., Dulf, E.H., Prodan, O., Experimental Results of a Fractional Order PD^λ Controller for Vibration Suppression, *The 14th International Conference on Control, Automation, Robotics and Vision, ICARCV 2016*, DOI: 10.1109/ICARCV.2016.7838715, Phuket, Thailand, 13 - 15 November 2016 (**ISI PRO**)
22. De Keyser, R., **Muresan, C.I.**, An Analysis of a New Continuous-to-Discrete Time Operator for the Approximation of Fractional Order Systems, *Workshop on Women in Engineering, 2016 IEEE International Conference on Systems, Man, and*

- Cybernetics (SMC 2016), DOI: 10.1109/SMC.2016.7844728, Budapest, Hungary, 9-12 October 2016 (**ISI PRO**)
23. Dulf, E.H., **Muresan, C.I.**, Both-Rusu, R., Dulf, F.V., (2016), Robust Auto-tuning Fractional Order Control of an Aerodynamical System, International Conference on Mechatronics, Control and Automation Engineering (MCAE 2016), published in Advances in Engineering Research, Atlantis Press, ISSN 2352-5401, DOI: doi:10.2991/mcae-16.2016.11, vol. 58, pp.42-45 (**ISI PRO**)
 24. I. Birs, S. Folea, F. Ionescu, O. Prodan, C.I. Muresan (2017), Preliminary results and simulation of an active pendulum system for a three floor building, X International Conference on Structural Dynamics, EURO DYN 2017, 10-13 September 2017, Rome, Italy, Procedia Engineering, Vol.199, pp. 1647-1652, DOI: 10.1016/j.proeng.2017.09.088 (**ISI PRO**)
 25. Birs, I.R., Folea, S., Copot, D., Prodan, O., **Muresan, C.I.** (2017), Comparative analysis and experimental results of advanced control strategies for vibration suppression in aircraft wings, 13th European Workshop on Advanced Control and Diagnosis, IOP Conf. Series: Journal of Physics: Conf. Series, vol. 783, 012054, DOI: 10.1088/1742-6596/783/1/012054, 17-18 November 2016, Lille France (**ISI PRO**)
 26. D. Copot, **C. I. Muresan**, R. De Keyser, C. Ionescu (2017) Patient specific model based induction of hypnosis using fractional order control, The 20th IFAC World Congress, IFAC Papers Online, Vol. 50, No. 1, pp. 15097-15102, DOI: 10.1016/j.ifacol.2017.08.2238, 9-14 July 2017, Toulouse, France (**ISI PRO**)
 27. I. R. Birs, S. Folea, C. I. Muresan (2017), An optimal fractional order controller for vibration attenuation, 25th Mediterranean Conference on Control and Automation, pp. 828-832, DOI: 10.1109/MED.2017.7984221, 3-6 July 2017, Valletta, Malta (**ISI PRO**)
 28. Markowski, K., **Muresan, C.I.** (2017), Smart Beam System: Identification and Minimal Realisation Using Digraphs Theory, Proceedings of The 22nd International Conference on Methods and Models in Automation and Robotics, DOI: 10.1109/MMAR.2017.8046852, pp.351-355, 28-31 August 2017, Międzyzdroje, Poland (**ISI PRO**)
 29. **C. I. Muresan**, I. Nascu, E. H. Dulf (2017), Design and Dynamics Analysis of a Fractional Order IMC Controller for a Waste Water Treatment Plant, 12th IEEE Conference on Industrial Electronics and Applications (ICIEA), pp. 693-698, DOI: 10.1109/ICIEA.2017.8282930, 18-20 June 2017, Siem Reap, Cambodia (**ISI PRO**)
 30. **Muresan, C.I.**, Folea, S., Birs, I.R., Ionescu, C.M. (2017), Fractional Order Modeling and Control of a Smart Beam, Proceedings of the 2017 IEEE Conference on Control Technology and Applications, DOI: 10.1109/CCTA.2017.8062672, 27-30 August 2017, Hawaii, USA (**ISI PRO**)
 31. De Keyser, R., Ionescu, C.M., Muresan C.I. (2017), Comparative Evaluation of a Novel Principle for PID Autotuning, Proceedings of the 11th Asian Control Conference (ASCC), pp. 1164-1169, DOI: 10.1109/ASCC.2017.8287335, 17-20 December 2017, Gold Coast, Australia (**ISI PRO**)
 32. Birs, I.R., **Muresan, C.I.**, Prodan, O., Folea, S.C., Ionescu, C.M. (2018), Structural vibration attenuation using a fractional order PD controller designed for a fractional order process, 3rd IFAC Conference on Advances in Proportional-

- Integral-Derivative Control PID 2018, IFAC-Papers Online, Vol. 51, no. 4, pp. 533-538, DOI: 10.1016/j.ifacol.2018.06.150 **(ISI PRO)**
- 33.** Muresan, C.I., De Keyser, R., Birs, I.R., Copot, D., Ionescu, C. (2018) Benchmark Challenge: a robust fractional order control autotuner for the Refrigeration Systems based on Vapor Compression, 3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2018, IFAC-Papers Online, Vol. 51, no. 4, pp. 31-36, DOI: 10.1016/j.ifacol.2018.06.021 **(ISI PRO)**
- 34.** Cajo, R., **Muresan, C.I.**, Ionescu, C., De Keyser, R., Plaza, D. (2018), Multivariable Fractional Order PI Autotuning Method for Heterogeneous Dynamic Systems, 3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2018, IFAC-Papers Online, Vol. 51, no. 4, pp. 865-870, DOI: 10.1016/j.ifacol.2018.06.120 **(ISI PRO)**
- 35.** De Keyser, R., **Muresan, C.I.**, Ionescu, C.M. (2018) Autotuning of a Robust Fractional Order PID Controller, Proceedings of the 9th IFAC Symposium on Robust Control Design (ROCOND'18), 3-5 September 2018, Florianopolis, Brazilia, IFAC Paper Online, Vol. 51, no. 25, pp. 466-471, DOI: 10.1016/j.ifacol.2018.11.181 **(ISI PRO)**
- 36.** De Keyser, R., **Muresan, C.I.**, Ionescu, C. (2018), Efficient Disturbance Rejection for Dead-Time Processes using Internal Model Control, Proceedings of the 2018 SICE International Symposium on Control Systems (SICE ISCS), pp. 213 – 219, DOI: 10.23919/SICEISCS.2018.8330178, 9-11 March 2018, Tokyo, Japan **(ISI PRO)**
- 37.** Birs, I.R., **Muresan, C.I.**, Prodan, O., Folea, S., Ionescu, C. (2018) Analytical modeling and preliminary fractional order velocity control of a small scale submersible, Proceedings of the 2018 SICE International Symposium on Control Systems (SICE ISCS), DOI: 10.23919/SICEISCS.2018.8330170, 9-11 March 2018, Tokyo, Japan **(ISI PRO)**
- 38.** Ionescu, C., Copot, D., Neckebroek, M., **Muresan, C.I.** (2018), Anesthesia regulation: towards completing the picture, Proceedings of the 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), DOI: 10.1109/AQTR.2018.8402783, 24-26 May 2018, Cluj-Napoca, Romania **(ISI PRO)**
- 39.** Copot, C., **Muresan, C.I.**, Mac Thi, T., Ionescu, C.M. (2018), An application to robot manipulator joint control by using constrained PID based PSO, Proceedings of the IEEE 12th International Symposium on Applied Computational Intelligence and Informatics – SACI, pp. 279-284, DOI: 10.1109/SACI.2018.8440927, 17-19 May 2018, Timisoara, Romania **(ISI PRO)**
- 40.** Birs, I.R. **Muresan, C.I.**, Nascu, I., Folea, S., Ionescu, C. (2018), Experimental results of fractional order PI controller designed for second order plus dead time (SOPDT) processes, Proceedings of the 2018 15th International Conference on Control, Automation, Robotics and Vision (ICARCV), DOI: 10.1109/ICARCV.2018.8581241, 18-21 November 2018, Singapore **(ISI PRO)**
- 41.** **Muresan, C.I.**, Birs, I., Prodan, O., Nascu, I., De Keyser, R. (2019), Approximation Methods for FO-IMC Controllers for Time Delay Systems, The 2nd International Conference on Electrical Engineering and Green Energy, Roma, E3S Web of Conferences, vol. 115, DOI: 10.1051/e3sconf/201911501003, Italy, June 28-30, 2019 **(ISI PRO)**

42. De Keyser, R., **Muresan, C.I.** (2019), Robust Estimation of a SOPDT Model from Highly Corrupted Step Response Data, European Control Conference, pp. 818-823, DOI: 10.23919/ECC.2019.8796103, Naples, Italy, 25-28 June 2019 (**ISI PRO**)
43. De Keyser, R., **Muresan, C.I.** (2019), Validation of the KC Autotuning Principle on a Multi-Tank Pilot Process, 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, Florianópolis - SC, Brazil, April 23-26, 2019, IFAC Papers Online, vol. 52, no. 1, pp. 178-183, DOI: 10.1016/j.ifacol.2019.06.05, 2019 (**ISI PRO**)
44. Birs, I., Copot, D., Muresan, C.I., De Keyser, R., Ionesc, C.M. (2019), Robust Fractional Order PI Control for Cardiac Output Stabilisation, 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, Florianópolis - SC, Brazil, April 23-26, 2019, IFAC-PapersOnLine, vol. 52, no. 1, pp. 994-999, DOI: 10.1016/j.ifacol.2019.06.192, 2019 (**ISI PRO**)
45. Birs, I.R., Ghita, Mi., Ghita, Ma., Copot, D., **Muresan, C.I.**, Ionescu, C. (2019), An Interdisciplinary, Low-Cost Methodological Framework for Analysing Dynamical Material Properties For Control-Related Applications, The 12th IFAC Symposium on Advances in Control Education, Philadelphia, USA, July 7-9 2019, IFAC-PapersOnLine, Vol. 52, No. 9, pp. 159-164, DOI: 10.1016/j.ifacol.2019.08.186 (**ISI PRO**)
46. **Muresan, C.I.**, Copot, C., Ionescu, C., De Keyser, R. (2019), Robust Fractional Order Control of LPV Dynamic Mechatronic Systems, The 15th IEEE International Conference on Control and Automation, pp. 154-159, doi: 10.1109/ICCA.2019.8899734, Edinburgh, Scotland, July 16-19 2019 (**ISI PRO**)
47. Birs I., Copot D., Pilato C., Ghita M., Caponetto R., **Muresan C.I.**, Ionescu, C. (2019), Experiment design and estimation methodology of varying properties for non-Newtonian fluids, 2019 IEEE International Conference on Systems, Man and Cybernetics (SMC), Bari, Italy, 2019, pp. 324-329, doi: 10.1109/SMC.2019.8914513 (**ISI PRO**)
48. Birs, I., Copot, D., Ghita, M., **Muresan, C.I.**, Ionescu, C.M. (2019), Fractional-order modeling of impedance measurements in a blood-resembling experimental setup, 2019 IEEE International Conference on Systems, Man and Cybernetics (SMC), Bari, Italy, 2019, pp. 898-903, doi: 10.1109/SMC.2019.8914573 (**ISI PRO**)
49. De Keyser, R., **Muresan, C.I.** (2019), Experimental Validation of an Efficient Disturbance Rejection Method for Dead-Time Processes using Internal Model Control, 2019 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), Zaragoza, Spain, 2019, pp. 475-480, doi: 10.1109/ETFA.2019.8869004 (**ISI PRO**)
50. Birs, I., **Muresan, C.I.**, Nascu, I., Ionescu, C. (2019), Design and Practical Implementation of a Fractional Order Proportional Integral Controller (FOPI) for a Poorly Damped Fractional Order Process with Time Delay, The 7th International Conference on Control, Mechatronics and Automation, *th International Conference on Control, Mechatronics and Automation (ICCMA)*, Delft, Netherlands, 2019, pp. 56-61, doi: 10.1109/ICCMA46720.2019.8988655, Delft, Netherlands, November 6-8, 2019 (**ISI PRO**)
51. I. Birs, C. I. Muresan, R. Both and I. Nascu (2020), A real life implementation of fractional order event based PI control, *2020 IEEE International Conference on*

- Automation, Quality and Testing, Robotics (AQTR)*, Cluj-Napoca, Romania, 2020, pp. 1-6, doi: 10.1109/AQTR49680.2020.9129933 **(ISI PRO)**
52. I. Birs, I. Nascu and C. I. Muresan (2020), Fractional Order Internal Model Control Strategies for a Submerged Nanorobot, *2020 International SAUPEC/RobMech/PRASA Conference*, Cape Town, South Africa, 29-31 January 2020, ISBN:978-1-7281-4163-3, Electronic ISBN: 978-1-7281-4162-6, DOI: 10.1109/SAUPEC/RobMech/PRASA48453.2020.9040977, pp. 1-6. **(ISI PRO)**
 53. Birs, I., **Muresan, C.** (2020), An event based implementation of a fractional order controller on a scalable nanorobot, *2020 European Control Conference (ECC)*, pp. 1436-1441, doi: 10.23919/ECC51009.2020.9143776, 12-15 May 2020, St. Petersburg, Russia **(ISI PRO)**
 54. De Keyser, R., **Muresan, C. I.** (2020), Internal Model Control: Efficient Disturbance Rejection for Dead-Time Process Models with Validation on an Active Suspension System, *The 2020 European Control Conference (ECC)*, pp. 106-111, doi: 10.23919/ECC51009.2020.9143977, 12-15 May 2020, St. Petersburg, Russia **(ISI PRO)**
 55. Maria Ghita, Dániel A. Drexler, Levente Kovács, Dana Copot, **Cristina I. Muresan**, Clara M. Ionescu (2020), Model-Based Management of Lung Cancer Radiation Therapy, *IFAC World Congress, IFAC-PapersOnLine*, vol. 53, no. 2, pp. 15928-15933, DOI: 10.1016/j.ifacol.2020.12.352 **(ISI PRO)**
 56. Isabela Birs, **Cristina Muresan**, Ioan Nascu, Clara Ionescu (2020), An Energy-Efficient Context Aware Solution for Environmental Assessment, *IFAC-PapersOnLine*, vol. 53, no. 5, pp. 756-761, DOI: 10.1016/j.ifacol.2021.04.169 **(ISI PRO)**
 57. Dana Copot, **Cristina Muresan**, Isabela Birs, Levente Kovacs (2020), Robust Hemodynamic Control Under General Anesthesia Conditions, *IFAC-PapersOnLine*, vol. 53, no. 2, pp.16179-16184, DOI: 10.1016/j.ifacol.2020.12.608 **(ISI PRO)**
 58. Erwin Hegedus, Isabela Birs, **Cristina Muresan** (2021), Fractional Order Control of the Combined Anaesthesia-Hemodynamic System: a Preliminary Study, *IFAC-PapersOnLine*, vol. 54, no. 15, pp. 19-24, DOI:10.1016/j.ifacol.2021.10.225 **(ISI PRO)**
 59. Isabela Birs; Cristina Muresan; Mihaela Ghita; Maria Ghita; Dana Copot; Martine Neckebroek; Clara Ionescu (2021), Development and validation of preliminary fractional order impedance models for experimental pain assessment, *2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME)*, pp. 1-6, doi: 10.1109/ICECCME52200.2021.9590863. **(ISI PRO)**
 60. I. Birs, C. Muresan, I. Nascu and R. De Keyser (2021), Experimental comparison between discrete time and event-based PID controllers on a nonlinear process, *2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME)*, 2021, pp. 1-6, doi: 10.1109/ICECCME52200.2021.9590879 **(ISI PRO)**
 61. I. Birs, C. Ionescu, I. Nascu, **C. Muresan** (2021), A comparison between FOIMC and FOPI controllers for a submerged robot, *2021 25th International Conference on System Theory, Control and Computing (ICSTCC)*, pp. 166-171, doi: 10.1109/ICSTCC52150.2021.9607189 **(ISI PRO)**

62. Maria Ghita, Mihaela Ghita, Dana Copot, Isabela R. Birs, **Cristina Muresan**, Clara M. Ionescu, Optimizing radiotherapy with chemotherapy using PKPD modeling for lung cancer, IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics, March 2-5, 2022, Poprad, Slovakia (in curs de indexare **ISI PROCEEDINGS**)
63. Mihaela Ghita, Maria Ghita, Copot Dana, Isabela Roxana Birs, **Cristina Muresan**, Clara-Mihaela Ionescu, Lumped Parametric Model for Skin Impedance Data in Patients with Postoperative Pain, 2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), Glasgow, United Kingdom, 11-15 July 2022 (in curs de indexare **ISI PROCEEDINGS**)
64. Mihaela Ghita, Dana Copot, Robin De Keyser, Isabela Birs, **Cristina Muresan** (2022), A robust self-tuning PID-type control for time-varying process in the pharmaceutical industry, The 13th Asian Control Conference (ASCC 2022), Jeju, Korea, May 3-7 2022 (in curs de indexare **ISI PROCEEDINGS**)
65. Robin De Keyser, Isabela Roxana Birs, **Cristina Ioana Muresan**, Dana Copot, Mihaela Ghita, Clara Mihaela Ionescu (2022), Versatile Solutions for the Combine Harvester Header Height Control Problem, The 13th Asian Control Conference (ASCC 2022), Jeju, Korea, May 3-7 2022 (in curs de indexare **ISI PROCEEDINGS**)
66. Isabela Roxana Birs, Clara Mihaela Ionescu, Robin De Keyser, Cosmin Copot, Cristina Muresan, Constantin Caruntu (2022), Control of Nonlinear Mechatronic Systems with Context-Dependent Varying Dynamics, The 13th Asian Control Conference (ASCC 2022), Jeju, Korea, May 3-7 2022 (in curs de indexare **ISI PROCEEDINGS**)
67. Robin M.C. De Keyser, Isabela Birs, Dana Copot, **Cristina-Ioana Muresan**, Clara Ionescu (2022), A theoretical framework to extract information from short, transient process data, 61st IEEE Conference on Decision and Control to be held in Cancun, Mexico, 6-9 December 2022 (in curs de indexare **ISI PROCEEDINGS**)
68. Marcian Mihai, Isabela Birs, Maria Ghita, Eva-Henrietta Dulf*, Robin M.C. De Keyser, **Cristina-Ioana Muresan** (2022), Robustness evaluation of several fractional order autotuners for time delay processes, 61st IEEE Conference on Decision and Control to be held in Cancun, Mexico, 6-9 December 2022 (in curs de indexare **ISI PROCEEDINGS**)
69. Isabela Birs, **Cristina-Ioana Muresan**, Mihaela Ghita, Robin M.C. De Keyser (2022), A low order approximation method for fractional order PID controlers, 61st IEEE Conference on Decision and Control to be held in Cancun, Mexico, 6-9 December 2022 (in curs de indexare **ISI PROCEEDINGS**)

D2. BDI conferences

1. **Pop, C.-I.**, De Keyser, R., Iononescu, C. M. (2011), A Simplified Control Method for Multivariable Stable Nonsquare Systems with Multiple Time Delays, *The 19th Mediterranean Conference on Control and Automation*, ISBN: 978-1-4577-0124-5, pp. 382-387, DOI: 10.1109/MED.2011.5983051, 20-23 iunie 2011, Corfu (**BDI**)
2. Dulf, E. –H., Festila, Cl., Dulf, F.-V., **Pop, C.-I.**, Both, R., Fractional Order Controller Design for 13C Separation Column, *The 19th Mediterranean Conference on Control*

- and Automation*, ISBN: 978-1-4577-0124-5, pp. 582-587, DOI: 10.1109/MED.2011.5983150, 20-23 iunie 2011, Corfu (**BDI**)
3. Muresan, B., **Pop, C.-I.**, Nascu, I., Crisan, R. D., Nonlinear Neuro-predictive Control of a Miniature Coaxial Helicopter, *The 19th Mediterranean Conference on Control and Automation*, ISBN: 978-1-4577-0124-5, pp. 1271-1276, DOI: 10.1109/MED.2011.5982978, 20-23 iunie 2011, Corfu (**BDI**)
 4. **Pop, C.-I.**, Dulf, E.-H., De Keyser, R., Ionescu, C. M., Muresan, B., Festila, Cl. (2011), Predictive Control of the Multivariable Time Delay Processes in an Isotope Separation Column, *6th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI 2011)*, ISBN: 978-1-4244-9108-7, pp. 29 – 34, DOI: 10.1109/SACI.2011.5872968, 19-21 mai 2011, Timisoara (**BDI**)
 5. A.O. Neaga, Cl. Festila, E.H. Dulf, T. Szelitzky, R. Both, **C.-I. Pop**, M. Gligan (2012), Electrical Power Monitoring and Control in 13C Isotope Separation Column Boiler, *7th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI)*, ISBN 978-1-4673-1013-0, pp.13-18, DOI: 10.1109/SACI.2012.6249968, 24-26 mai 2012, Timisoara (**BDI**)
 6. **Muresan, C.-I.**, Both, R., Ionescu, C.M., Dulf, E.-H. (2012), Fractional Order Control for the Temperature Loop in a Chemical Reactor, *16th International Conference on System Theory, Control and Computing*, IEEE Catalog Number CFP1236P-CDR, ISBN 978-606-834-848-3, pp. 1-5, 12-14 octombrie 2012, Sinaia (**BDI**)
 7. **Muresan, C.-I.**, Dulf, E.H., Ionescu, C. (2012), Multivariable Fractional Order PI Controller for Time Delay Processes, *International Conference on Engineering and Applied Science*, DOI: 10.2316/P.2012.785-029, 27-29 decembrie 2012, Colombo, Sri Lanka (**BDI**)
 8. **Muresan, C.I.**, Dulf, E.H., Both, R. (2013), Fractional and Integer Order Control. Application to DC motor speed control, *17th International Conference on System Theory, Control and Computing Joint Conference SINTES 17, SACCS 13, SIMSIS 17*, ISBN: 978-1-4799-2227-7, DOI: 10.1109/ICSTCC.2013.6688986, pp. 362 – 367, 11 - 13 October 2013, Sinaia, Romania (**BDI**)
 9. **Muresan, C.I.**, Dulf, E.H., Both, R., Ionescu, C.M., Nascu, I. (2014), Improving performance for a 13C isotope separation plant using multivariable fractional order controllers, *International Conference on Fractional Differentiation and its Applications*, pp. 1-6, DOI: 10.1109/ICFDA.2014.6967385, 23-25 June, Catania, Italy (**BDI**)
 10. Dulf, E.H., **Muresan, C.I.**, Both, R., Dulf, F.V. (2014), Fractional order controller design for a large class of process models, *International Conference on Fractional Differentiation and its Applications*, pp. 1-6, DOI: 10.1109/ICFDA.2014.6967448, 23-25 June, Catania, Italy (**BDI**)
 11. Folea, S., Marton, B., **Muresan, C.I.** (2014), Stabilizing control strategies: A comparison between the fractional order controller and the IMC, *The 18th International Conference System Theory, Control and Computing (ICSTCC)*, pp. 59 – 63, DOI: 10.1109/ICSTCC.2014.6982391, October 17-19, Sinaia, Romania (**BDI**)
 12. **Muresan, C.I.**, Dulf, E.H., Both, R. (2015), A Novel Tuning Algorithm for Fractional Order IMC Controllers for Time Delay Processes, *International Journal of Mechanical Engineering and Robotics Research*, Vol. 4, No. 3, 218-221, DOI:

- 10.18178/ijmerr.4.3.218-221, paper selected at the International Conference on Mechanical Manufacturing and Control, 21-23 November, Singapore (**BDI**)
13. Dulf, E.H., Both, R., **Muresan, C.I.** (2015), Fractional order PID controller design for mechatronic systems, *SIAM Conference on Control and its Applications*, pp. 469-474, DOI: 10.1137/1.9781611974072.64, Paris, France, 8-10 July 2015 (**BDI**)
 14. Birs, I.R., Muresan, C.I., Folea, S., Prodan, O. (2017), An experimental nanomedical platform for controller validation on targeted drug delivery, Proceedings of the Australian and New Zealand Control Conference (ANZCC), pp. 161-165, DOI: 10.1109/ANZCC.2017.8298504, 17-20 December 2017, Gold Coast, Australia (**BDI**)
 15. Birs, I.R. **Muresan, C.I.**, Folea, S., Prodan, O., Ionescu, C. (2018), Fractional order modeling and control of a carrier prototype for targeted drug delivery, Proceedings of the 2018 2nd International Conference on Computational Biology and Bioinformatics, pp.1-5, DOI: 10.1145/3290818.3290833, paper selected at The 2nd International Conference on Industrial Design Engineering (ICIDE 2018), 21-23 September 2018, Phuket, Thailand, ICCBB2018-ACM (**BDI**)

Signature

