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L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

1. *Conducerea Automată a Bioreactorului Enzimatic*, Universitatea din Craiova, Domeniul Automatică, conducător științific: prof. dr. ing. Vladimir Răsvan, susținere publică în 18.12.1999, Diplomă: Seria A Nr. 0002398, Ordinul M.E.N. 3337/08.03.2000.

B. Cărți și capitole în cărți publicate în ultimii 10 ani (selecție)

1. **Selișteanu, D.**, E. Petre, I.M. Popescu, M. Roman, *Advanced Control Algorithms and Software Solutions for Monitoring and Data Acquisition in a Wastewater Treatment Plant*, in: *Advances in Environmental Research*, Vol. 76 (Justin A. Daniels Ed.), Chapter 3, pp. 125-161, Nova Science Publ., Inc., Hauppauge, NY, USA, ISBN: 978-1-53618-690-1, 2020.
2. **Selișteanu, D.**, *Research and achievements in modelling and control of bioprocesses*, Editura Universitaria, Craiova, 114 pagini, ISBN: 978-606-14-1482-6, 2019.
3. **Selișteanu, D.**, I.M. Popescu, E. Petre, M. Roman, D. Șendrescu, B. Popa, *Distributed Control Systems for a Wastewater Treatment Plant: Architectures and Advanced Control Solutions*, in: *Wastewater and Water Quality* (Taner Yonar Ed.), Chapter 9, pp. 153-181, IntechOpen, London, UK, ISBN 978-1-78923-620-0, 2018.
4. Șendrescu, D., S. Tebbani, **D. Selișteanu**, *Bioprocesses Parameter Estimation by Heuristic Optimization Techniques*, in *Developments in Model-Based Optimization and Control* (S. Olaru, A. Grancharova, F.L. Pereira Eds.), Chapter 11, pp. 237-254, *Lecture Notes in Control and Information Sciences* 464, Springer, ISBN 978-3-319-26685-5, 2015.
5. Caramihai, M., S. Caraman, E. Petre, **D. Selișteanu**, M. Barbu, C. Tănase, *Modelarea și controlul proceselor biotehnologice*, în: *Automatica* (Ed. I. Dumitrache), Vol. 3, Cap. 34, pp. 257-384, Ed. Academiei Române, București, ISBN 978-973-27-2613-6, 2015.
6. **Selișteanu, D.**, C. Ionete, E. Petre, *Instrumentație virtuală. Aplicații de prelucrare numerică a semnalelor*, Editura Matrix Rom, București, 202 pagini, ISBN: 978-973-755-594-6, 2010.
7. Popescu D., **D. Selișteanu**, C. Ionete, M. Roman, L. Popescu, *Neural and Adaptive Control Strategies for a Rigid Link Manipulator*, in: *Robot Manipulators, Trends and Development* (A. Jimenez, B.M. Al Hadithi Eds.), Chapter 11, pp. 249-266, In-Tech Publ., Vukovar, Croatia, ISBN 978-953-307-073-5, 2010.

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

1. Petre, E., **D. Selișteanu**, M. Roman, „Control schemes for a complex biorefinery plant for bioenergy and biobased products”, *Bioresource Technology*, Elsevier, Vol. 295, Art. no. 122245, Jan. 2020, DOI: 10.1016/j.biortech.2019.122245, ISSN 0960-8524, [ISI, IF 7.539].
2. Stîngă, F., M. Marian, **D. Selișteanu**, „Robust estimation-based control strategies for induction motors”, *Complexity*, Wiley-Hindawi, Vol. 2020, Art. ID 9235701, July 2020, DOI: 10.1155/2020/9235701, ISSN 1076-2787, [ISI, IF 2.462].
3. Marin, C., D. Popescu, E. Petre, **D. Selișteanu**, „Modeling and control of the orthogonalization plants in textile industry”, *IEEE Transactions on Industry Applications*, Vol. 55, Issue: 4, pp. 4247-4257, Jul.-Aug. 2019, DOI: 10.1109/TIA.2019.2907893, ISSN 0093-9994, [ISI, IF 3.488].
4. **Selișteanu, D.**, D. Șendrescu, V. Georgeanu, M. Roman, „Mammalian cell culture process for monoclonal antibody production: Nonlinear modelling and parameter estimation”, *BioMed Research International*, ID 598721, 16 p., 2015, ISSN 2314-6133, [ISI, IF 2.276].
5. Petre, E., S. Tebbani, **D. Selișteanu**, „Robust-adaptive control strategies for a time delay bioelectrochemical process using interval observers”, *Asian J. Control*, Wiley, Vol. 17, No. 5, pp. 1767-1778, Sept.2015, ISSN 1561-8625, [ISI, IF 2.779].
6. **Selișteanu, D.**, S. Tebbani, M. Roman, E. Petre, V. Georgeanu, „Microbial production of enzymes: Nonlinear state and kinetic reaction rates estimation”, *Biochemical Engineering Journal*, Elsevier, Vol. 91, pp. 23-36, October 2014, ISSN 1369-703X, [ISI, IF 3.475].
7. Roman, M., D. Popescu, **D. Selișteanu**, „An interactive teaching system for bond graph modeling and simulation in bioengineering”, *J. Educ. Technology & Society*, ISSN 1436-4522, Vol. 16, No. 4, pp. 17-31, Oct. 2013. [ISI, IF 2.086].
8. Petre, E., **D. Selișteanu**, D. Șendrescu, „Adaptive and robust-adaptive control strategies for anaerobic wastewater treatment bioprocesses”, *Chemical Engineering Journal*, Elsevier, Vol. 217, pp. 363-378, February 2013, doi:10.1016/j.cej.2012.11.129, ISSN 1385-8947 [ISI, IF 10.652].
9. **Selișteanu, D.**, E. Petre, M. Roman, D. Șendrescu, „Estimation of kinetic rates in a baker's yeast fed-batch bioprocess by using nonlinear observers”, *IET Control Theory & Applications*, Vol. 6, Issue 2, pp. 243-253, Jan. 2012, doi:10.1049/iet-cta.2011.0067, ISSN 1751-8644, [ISI, IF 3.343].
10. Marin, C., **D. Selișteanu**, D. Șendrescu, „Nonlinear identification and control of DC-DC converter based on heterogeneous approach”, *Revue Roumaine des Sciences Techn., Série électrotechnique et énergétique*, Vol. 56, No. 3, pp. 325-335, 2011, ISSN 0035-4066, [ISI, IF 0.76].

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)**- Reviste**

1. Rigatos, G., P. Siano, **D. Selișteanu**, R. E. Precup, „Nonlinear Optimal Control of Oxygen and Carbon Dioxide Levels in Blood”, *Intel. Industrial Systems*, Springer, Vol. 3, pp. 61-75, 2017, ISSN: 2363-6912, doi:10.1007/s40903-016-0060-y, [SpringerLink].
2. Roman, M., E. Bobașu, **D. Selișteanu**, D. Șendrescu, „Bond Graph Modelling of Chemical Reaction Based Processes”, *International Review on Modelling and Simulations*, Vol. 3, No. 1, pp. 108-115, 2010, ISSN 1974-9821, [Scopus].

- Selecție cu maximum 20 lucrări în volume de conferințe

3. **Selișteanu, D.**, E. Petre, R. Prejbeanu, I.M. Popescu, S. Mehedințeanu, „Software solutions for simulation, monitoring and data acquisition in wastewater treatment plants“, *Proc. of 21st International Carpathian Control Conference ICCC'2020*, Oct. 27-29, 2020, Slovak Republic, ISBN: 978-1-7281-1951-9, doi: 10.1109/ICCC49264.2020.9257268. [IEEE Xplore]
4. **Selișteanu, D.**, M. Roman, E. Petre, D. Popescu, „Software sensors in bioindustry: Asymptotic and interval observers for state estimation“, *Proc. of 2nd IEEE Int. Conf. on Knowledge Innovation and Invention ICKII 2019*, ISBN: 978-1-7281-0110-1, pp. 315-318, 13-16 July, 2019, Seoul, South Korea, Paper No: K190127. [IEEE Xplore]
5. **Selișteanu, D.**, M. Roman, D. Șendrescu, E. Petre, B. Popa, „A distributed control system for processes in food industry: Architecture and implementation“, *Proc. of 2018 19th International Carpathian Control Conf. ICCC*, Szilvasvarad, Hungary, 2018, pp. 128-133, ISBN 978-1-5386-4762-2. [ISI Proc.]
6. Constantinescu, R.L., M. Roman, **D. Selișteanu**, „Simplified numerical methods used for the approximations of chaotic solutions of dynamical systems“, *Proc. Int. Carpathian Control Conf.*, Sinaia, 2017, pp. 560-564, ISBN 978-1-5090-4862-5. [IEEE Xplore]
7. Marin, C., D. Popescu, E. Petre, **D. Selișteanu**, „Mathematical modelling of systems with state dependent delays. Applications for conveyer belt plants“, *Proc. IEEE International Carpathian Control Conf. ICCC 2016*, Tatranská Lomnica, Slovak Republic, 2016, ISBN 978-1-4673-8606-7, pp. 479-484. [ISI Proc., IEEE Xplore]
8. Ivanov, S., V. Ivanov, D. Cismaru, F. Ravigan, **D. Selișteanu**, D. Șendrescu, “Comparison of several control strategies of the BLDC motors”, *Proc. 29th European Conf. Modelling & Simulation ECMS 2015*, May 26-29, 2015, Varna, Bulgaria, 6 p., ISBN 978-0-9932440-0-1. [IEEE Xplore]
9. Benattia S.E., S. Tebbani, D. Dumur, **D. Selișteanu**, „Robust Nonlinear Model Predictive Controller Based on Sensitivity Analysis - Application to a Continuous Photobioreactor“, *Proceedings of 2014 IEEE Int. Conference on Control Applications (CCA), Part of 2014 IEEE Multi-conference on Systems and Control*, October 8-10, 2014, Nice/Antibes, France, pp. 1705-1710. ISBN 978-1-4799-7408-5/14. [ISI Proc., IEEE Xplore]
10. Marin, C., **D. Selișteanu**, D. Șendrescu, “State Blocking Systems: Modeling and behavior”, *Proc. of 2013 14th International Carpathian Control Conference ICCC*, May 26-29, 2013, Rytro, Poland, pp. 232-237, ISBN 978-1-4673-4488-3, [ISI Proc., IEEE Xplore]
11. Șendrescu, D., M. Roman, **D. Selișteanu**, „Interactive Teaching System for Simulation and Control of Electropneumatic and Electrohydraulic Systems“, *Proc. of 24th EAEEIE (European Association for Education in Electrical & Information Engineering) Annual Conf.*, 30-31 May, 2013, Chania, Greece, pp. 151-156, ISBN 978-1-4799-0042-8. [IEEE Xplore]
12. **Selișteanu, D.**, E. Petre, D. Șendrescu, M. Roman, „Nonlinear Indirect Adaptive Control of a Fed-Batch Fermentation Bioprocess“, *Proc. of 17th International Conference on Methods and Models in Automation and Robotics MMAR 2012*, ISBN 978-1-4673-2123-5, pp. 367-372, August 27-30, 2012, Miedzyzdroje, Poland. [ISI Proc., IEEE Xplore].

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