

**A N E X A 4 . 6**

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**L I S T A****lucrărilor științifice în domeniul disciplinelor din postul didactic****A. Teza de doctorat****Titlul:** Algoritmi de identificare folosind metoda momentelor ponderate**Coordonator:** Prof. dr. ing. Vladimir Răsvan**Domeniul:** Sisteme Automate**Data susținerii:** 23 martie 2007**B. Cărți și capitole în cărți publicate în ultimii 10 ani**

1. D. Selișteanu, E. Petre, **D. Șendrescu**, M. Roman, *High-Gain Observers for Estimation of Kinetics in Batch and Continuous Bioreactors*, in: *Mathematical Chemistry* (Editor W.I. Hong), Nova Science Publishers, Inc., New York, ISBN 978-1-60876-894-3, 2010.
2. Eugen Bobașu, Monica Roman, **Dorin Șendrescu**, *Identificarea sistemelor.*, Ed. Universitaria, Craiova, 2010, 170 pag., ISBN: 978-606-510-977-3.
3. **Șendrescu Dorin**, *Metode și algoritmi pentru identificarea parametrică a sistemelor*, Editura Universitaria, ISBN 978-606-14-0662-3, (222 pag.), Martie 2013.
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.

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

1. Marin, C., D. Selișteanu, **D. Șendrescu**, „Nonlinear identification and control of DC-DC converter based on heterogeneous approach”, *Revue Roumaine des Sciences Techniques, Série électrotechnique et énergétique*, vol. 56, no. 3, pp. 325-335, 2011, ISSN 0035-4066, WOS:000298453900009. **[ISI](FI=1.114)**

2. Selisteanu D, Petre E, Roman M, **Sendrescu D.**, Estimation of kinetic rates in a baker's yeast fed-batch bioprocess by using non-linear observers, *Control Theory & Applications, IET*, 2012, 6 (2), doi: 10.1049/iet-cta.2011.0067, 2011, ISSN 1751-8644, 243 – 253, WOS:000299110800008 **[ISI Q1] (FI=3.296)**
3. **Sendrescu Dorin**, Distribution-Based Identification of Yield Coefficients in a Baker's Yeast Bioprocess, *Mathematical Problems in Engineering*, Volume 2012, Article ID 789156, 21 pages doi:10.1155/2012/789156, WOS:000302689000001. **[ISI] (FI=1.145)**
4. E. Petre, D. Selișteanu, **D. Șendrescu**, Adaptive and Robust-Adaptive Control Strategies for Anaerobic Wastewater Treatment Bioprocesses, *Chemical Engineering Journal* (2013), doi: [http://dx.doi.org/ 10.1016/j.cej.2012.11.129](http://dx.doi.org/10.1016/j.cej.2012.11.129), WOS:000316835600042, **[ISI - Q1] (FI=6.735)**
5. **Sendrescu Dorin**, Parameter Identification of Anaerobic Wastewater Treatment Bioprocesses Using Particle Swarm Optimization, *Mathematical Problems in Engineering*, Volume 2013, Article ID 103748, 8 pages doi: doi:10.1155/2013/103748, WOS:000322465700001. **[ISI] (FI=1.145)**
6. Mureseanu, Mihaela; Popa, Dana Elena; Buleandra, Mihaela; **Sendrescu Dorin**; et al., Copper Electrochemical Detection with Hybrid Mesoporous Silica-Gly-Gly-His Modified Electrodes, *International Journal of Electrochemical Science*, Volume: 9 Issue: 9 Pages: 5035-5048 WOS:000344174000025 Published: SEP 2014. **[ISI] (FI=1.629)**
7. Selisteanu, D, **Sendrescu, D.**, Georgeanu, V., Roman, M., Copper Mammalian Cell Culture Process for Monoclonal Antibody Production: Nonlinear Modelling and Parameter Estimation, *Biomed Research International*, ISSN: 2314-6133, WOS:000349086600001, Published: 2015. **[ISI] (FI=2.134)**

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8. **D. Sendrescu**, Parameter Identification of a DC Motor via Distribution Based Approach, *Proceedings of 17th Int'l Conference on Methods and Models in Automation and Robotics, MMAR 2012*, pp 17 – 22, WOS:000312660400005.
9. Dan Selișteanu, Emil Petre, **Dorin Șendrescu**, Monica Roman, Nonlinear Indirect Adaptive Control of a Fed-Batch Fermentation Bioprocess *Proceedings of 17th Int'l Conference on Methods and Models in Automation and Robotics, MMAR 2012*, WOS:000312660400067.
10. Marin, C., D. Selișteanu, **D. Șendrescu**, "State Blocking Systems: Modeling and behavior", *Proc. of 2013 14th International Carpathian Control Conference ICCS*, May 26-29, 2013, Rytro, Poland, pp. 232-237, ISBN 978-1-4673-4488-3, DOI:10.1109/CarpathianCC.2013.6560544, WOS:000324243800045.
11. **D. Șendrescu**, E. Bobașu, Parameter identification of bacterial growth bioprocesses using heuristics for global optimization, *Proc. of 2013 17<sup>th</sup> Int. Conference on System Theory, Control and Computing ICSTCC*, October 11-13, 2013, Sinaia, Romania, pp. 485 - 490, ISBN 978-1-4799-2228-4, 978-1-4799-2227-7, IEEE Catalog No. CFP1336P-CDR, WOS:000330660500076.
12. Roman, M., D. Selișteanu, E. Bobașu, **D. Șendrescu**, "Modeling of Culture Cells for Pharmaceutical Industry Applications", *Proc. of 2013 17<sup>th</sup> Int. Conference on System Theory, Control and Computing ICSTCC*, October 11-13, 2013, Sinaia, Romania, pp. 459-464, ISBN

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13. Marin, C., D. Selișteanu, **D. Șendrescu**, “Finite Time Response Control of State Blocking Systems”, *Proc. of 2013 19th International Conference on Control Systems and Computer Science CSCS*, May 29-31, 2013, Bucharest, Romania, pp. 10-17, ISBN 978-1-4673-6140-8, DOI:10.1109/CSCS.2013.97, WOS:000328493800002.
14. **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, DOI: 10.1109/EAEEIE.2013.6576519, ISBN 978-1-4799-0042-8, WOS:000332827800029.
15. **D. Șendrescu**, M. Roman, Parameter identification of bacterial growth bioprocesses using particle swarm optimization, *Proc. of 9th Asian Control Conference (ASCC)*, pp. 1 – 6, ISBN: 978-1-4673-5767-8, DOI: 10.1109/ASCC.2013.6606279, Istanbul, 23-26 June 2013, WOS:000333734900290.
16. **Sendrescu Dorin**, Selișteanu Dan, Modeling of bacterial growth bioprocesses based on heuristic optimization techniques, Published in: *Proc. of 16th International Carpathian Control Conference (ICCC)*, 2015, Date of Conference: 27-30 May 2015, Szilvasvarad, Hungary, Page(s): 470 – 474, Print ISBN:978-1-4799-7370-5, WOS:000380488000088.
17. Petre, E., **Sendrescu, D.**, On-line Estimation and Control Strategies for a Microalgae Fermentation Continuous Process, Published in: *Proc. of 16th International Carpathian Control Conference (ICCC)*, 2015, Date of Conference: 27-30 May 2015, Szilvasvarad, Hungary, Page(s): 470 – 474, Print ISBN:978-1-4799-7370-5, WOS:000380488000072.
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19. Emil Petre; Dan Selișteanu; **Dorin Șendrescu**; Marian Barbu; Sergiu Caraman, An adaptive control structure for an anaerobic digestion process with unknown inputs, Published in: *Proc. of 18th International Carpathian Control Conference (ICCC 2017)*, Date of Conference: 28-31 May 2017, Sinaia, Romania, Pages: 58 – 63, Electronic ISBN: 978-1-5090-4862-5, WOS:000426954400012.
20. **Dorin Șendrescu**, Emil Petre; Dan Selișteanu, Nonlinear PID controller for a Bacterial Growth Bioprocess, Published in: *Proc. of 18th International Carpathian Control Conference (ICCC 2017)*, Date of Conference: 28-31 May 2017, Sinaia, Romania, Pages: 151 - 155 Electronic ISBN: 978-1-5090-4862-5, WOS:000426954400029.
21. **Dorin Sendrescu**; Gheorghe Bujgoi, Iterative Learning Control for a Rotary Flexible Joint Experiment, 20<sup>th</sup> ICC, DOI: 10.1109/CarpathianCC.2019.8766005, ISBN:978-1-7281-0703-5, 26-29 May 2019, Wieliczka, Poland.
22. **Dorin Sendrescu**; Gheorghe Bujgoi; Dan Chintescu, Control of a Rotary Flexible Joint Experiment based on Reinforcement Learning, *Proceedings of 21th International Carpathian Control Conference (ICCC)*, DOI: 10.1109/ICCC49264.2020.9257295, ISBN:978-1-7281-1952-6, 27-29 Oct. 2020

Data:22.02.2021

Semnătura: