

## LISTA DE LUCRĂRI

### a) Lista lucrărilor relevante pentru realizările profesionale proprii

1. Petre E., Selișteanu D., **Roman M.**, „Nonlinear Robust Adaptive Control Strategies for a Lactic Fermentation Process”, *Journal of Chemical Technology & Biotechnology*, Wiley, Vol. 93, Issue 2, pp. 518-526, ISSN 0268-2575, 2018.  
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6. **Roman M.**, Popescu D., Selișteanu D., “An Interactive Teaching System for Bond Graph Modeling and Simulation in Bioengineering”, *Journal of Educational Technology & Society*, Vol. 16, Iss. 4, pp. 17-31, ISSN: 1436-4522, 2013.  
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10. **Roman M.**, D. Selișteanu, “Pseudo Bond Graph Modelling of Wastewater Treatment Bioprocesses”, *SIMULATION: Transactions of The Society for Modeling and Simulation International*, Vol. 88, No. 2, pp. 233-251, ISSN 0037-5497, 2012.  
[WOS:000298961400006](#)

## b) Teza de doctorat

Doctorat în **Domeniul fundamental: Științe ingineresti, Domeniul: Automatică**, titlul tezei “*Aplicații ale modelării prin Bond Graph*”, Conducător de doctorat: prof. dr. ing. Vladimir Răsvan. Data susținerii tezei de doctorat: 29.09.2009. Calificativ: *Foarte bine*. Distincție: *Cum Laude*.

## c) Cărți și capitole de cărți

1. **Roman M.**, Contribution to modelling, simulation and control of chemical reaction based processes, Ed. Universitaria, Ed. Universitaria, Craiova, ISBN 978-606-14-1481-9, 127p., 2019.
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3. **Roman M.**, *Modelarea Bond Graph a proceselor biotehnologice*, Ed. Universitaria, Ed. Universitaria, Craiova, ISBN 978-606-14-0622-7, 206 p., 2013.
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2. Selișteanu D., Popescu I.M., **Roman M.**, Șulea-Iorgulescu C., Mehedințeanu S., „A Software Emulator for the Modelling and Control of an Activated Sludge Process in a Wastewater Treatment Plant”, *Processes*, 9(11):2054, 2021, DOI: 10.3390/pr9112054, ISSN 2227-9717. [WOS:000724894000001](#)
3. Selișteanu D., **Roman M.**, L. Mandache, R. Prejbeanu, S. Ivanov, A. Radu, „Three-Level Inverter Control Techniques: Design, Analysis, and Comparisons”, *Elektronika Ir Elektrotehnika*, Vol. 27, Issue 3, pp. 26-37, 2021, DOI: 10.5755/j02.eie.29015, ISSN 1392-1215. [WOS:000668351900003](#)
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5. Tan J, Olaru S., **Roman M.**; F. Xu, B. Liang, „Invariant Set-Based Analysis of Minimal Detectable Fault for Discrete-Time LPV Systems With Bounded Uncertainties”, *IEEE ACCESS*, Vol. 7, pp. 152564-152575. [WOS:000497163000175 Q1](#)
6. Petre E., Selișteanu D., **Roman M.**, „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. [WOS:000499718900019 Q1](#)

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**e) Publicații in extenso apărute în volumele unor conferințe internaționale de specialitate, cu referenți și comitet de program**

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2. Nicola M., Nicola C.I., Ionete C., Sendrescu D., **Roman M.**, Improved Performance for PMSM Control Based on Robust Controller and Reinforcement Learning, 2022 26TH INTERNATIONAL CONFERENCE ON SYSTEM THEORY, CONTROL AND COMPUTING (ICSTCC), Page207-212, 2022. WOS:000889980600036

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12. Mandache L., Ivanov S., Prejbeanu R., **Roman M.**, Sarbu I.G., Ivanov V., Radu A. Reliable Time-Domain Analysis of Nonlinear Lumped Circuits with Topology Issues, Suitable for Transients of AC Drives, (SIEMEN) 2019 | 2019 INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND ENERGY SYSTEMS (SIEMEN). [WOS:000630287500046](#)
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