
LISTA

lucrărilor științifice în domeniul disciplinelor din postul didactic

A – Teza de doctorat

„Contributii privind modelarea si simularea proceselor cu parametri distribuiti”
conducător științific : Prof.dr.ing. Mihail Abrudean

Universitatea Tehnica Cluj Napoca

Susținere publică: 02.03.2018.

B – Cărți și capitole în cărți

CĂRȚI – D. Sas, „Modelarea si simularea proceselor cu parametri distribuiti”, Editura Galaxia Gutenberg, Cluj-Napoca, 2019, 98 pagini, ISBN: 978-973-141-804-9
<https://galaxiagutenberg.ro/Modelarea-si-simularea-proceselor-cu-parametri-distribuiti?search=Modelarea>

D.Sas, „Programare orientată pe obiecte – îndrumator laborator”, Editura Galaxia Gutenberg, Cluj-Napoca, 2020, 50 pagini, ISBN: 978-973-141-865-0

C – Lucrări indexate ISI/BDI

1. D. Sas, Mihaela-Ligia Ungurean, Tiberiu Colosi, *Process modeling and simulation of distributed parameter using M_{pdx} method with approximating solutions*, ISI - Proceeding, IEEE - AQTR 2014, Cluj-Napoca, p. 57-62. Print ISBN: 978-1-4799-3731-8.
<http://ieeexplore.ieee.org/document/6857833/>
2. D. Sas, M. Secara *Preliminaries in numerical simulation of isotope separation closed-loop processes* 2015 International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-4799-7650-8
<http://ieeexplore.ieee.org/document/7158445/>
3. D. Sas, M. Secara *Preliminaries in numerical simulation of isotope separation open-loop processes* 2015 International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-4799-7650-8
<http://ieeexplore.ieee.org/document/7158446/>
4. M. Secara, D. Sas *Mathematical model for 18O isotope separation column operated by product extraction regime* 2015 International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-4799-7650-8
<http://ieeexplore.ieee.org/document/7158444/>

-
5. M. Secara, D. Sas *Mathematical model for 18O separation column based on chemical exchange between nitric oxides and nitric acid solution operated at total reflux* 2015 International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-4799-7650-8
<http://ieeexplore.ieee.org/document/7158443/>
 6. D. Sas, Z. Kovendi, *Preliminaries in (Mpdx) method associated with Cohen equations* 2016 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) Proceedings, Cluj-Napoca, Romania, ISBN: 978-1-4673-8692-0
<http://ieeexplore.ieee.org/abstract/document/7501386/>
 7. I. Clitan, V. Muresan, M. Abrudean, D. Sas *Optimizing the Casting Length of a Single Diameter Steel Billets Based on Minimum Cost* 2016 International Conference on System Theory, Control and Computing (ICSTCC), Joint Conference of SINTES 20, SACCS 16, SIMSIS 20 – Proceedings, Sinaia, Romania, ISBN: 978-1-5090-2720-0
<http://ieeexplore.ieee.org/document/7790643/>
 8. V. Mureşan, M. Abrudean, H. Vălean, I. Clitan, M.-L. Ungureşan, T. Coloşii, D. Sas, A. Puşcaşiu, A. Fanca *Pipes Temperature Control in an Annealing Furnace*, 2017 International Carpathian Control Conference (ICCC), Sinaia, Romania, ISBN: 978-1-5090-4862-5
<http://ieeexplore.ieee.org/document/7970437/>
 9. I. Clitan, V. Muresan, M. Abrudean, D. Sas *Automatic Determination of Optimal Length of Casting Steel Blocks in the Context of an Imprecise Manufacturing* 2017 International Conference on Control Systems and Computer Science (CSCS) Bucuresti, Romania ISBN: 978-1-5386-1839-4
<http://ieeexplore.ieee.org/document/7968548/>
 10. D. Sas, Z. Kovendi, L. Coroiu, E.-I. Gergely, G. Husi *Modeling and simulation of a Carbon 13C Separation Process by low temperature Distilation* IEEE 2017 14th International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-5090-6073-3
<http://ieeexplore.ieee.org/document/7980416/>
 11. O. Bunta, V. Muresan, D. Sas, T. Colosi, *Time and space constants in the orthodontic dynamics*, IEEE 2017 14th International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-5090-6073-3
<http://ieeexplore.ieee.org/document/7980414/>

-
12. O. Bunta, V. Muresan, D. Sas, T. Colosi, *Mathematical formalisms used in the orthodontic dynamics*, IEEE 2017 14th International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, ISBN: 978-1-5090-6073-3
<http://ieeexplore.ieee.org/document/7980413/>
13. D. Sas, Z. Kovendi, E.-I. Gergely, G. Husi, L. Coroiu *Preliminaries in Carbon 13C Separation Process by low temperature Distillation* 2017 Journal of Electrical and Electronics Engineering (JEEE), ISSN: 1844-6035
<https://electroinf.uoradea.ro/index.php/volumes-2/jeee-vol-10-nr-1-may-2017.html>
14. D. Sas, I. Clitan, M. Abrudean, V. Muresan, T. Colosi *Optimization of the number of steel billets that need to be casted in a charge using Simplex method* Applied Mechanics and Materials, Vol. 859, pp. 183-187, 2017, DOI:10.4028/www.scientific.net/AMM.859.183
<https://www.scientific.net/AMM.859.183>
15. I. Clitan, V. Muresan, M. Abrudean, D. Sas *Optimization of the Casting Length of Billets and Computation of Minimum Number of Steel Batches* Applied Mechanics and Materials, Vol. 859, pp. 177-182, 2017, Electronic ISBN: 978-1-5090-2720-0
<https://www.scientific.net/AMM.859.177>
16. S. Sfeciş, M. Abrudean, D. Sas, M-L Ungureşan, I. Clitan, V. Mureşan, *Modeling and Simulation of the Sulfur Dioxide Adsorption Process in Natural Zeolites*, Applied Mechanics & Materials, 2015, Vol. 811, p35-42, DOI 10.4028/www.scientific.net/AMM.811.35
<https://www.scientific.net/AMM.811.35>
17. D. Sas, I.Clian, M.-L.Unguresan, V. Muresan, *Analytical modeling of an 15N isotope separation column by second-order quasi-linear equations with two independent variables* International Conference on Aerospace, Robotics, Biomechanics, Neurorehabilitation, Mechanical Engineering and Manufacturing Systems (ICMERA) 2017, Bucuresti, Romania
<http://www.ijmo.org/index.php?m=content&c=index&a=show&catid=72&id=747>
18. V. Muresan, D.Sas, I.Clitan, M.-L.Unguresan, "Preliminaries of structural parameters approximation through transcendence equations for an 15N isotope separation column", International Conference on Aerospace, Robotics, Biomechanics, Neurorehabilitation, Mechanical Engineering and Manufacturing Systems (ICMERA 2017), Bucuresti, Romania
<http://www.ijmo.org/index.php?m=content&c=index&a=show&catid=72&id=746>

-
19. D. Sas, Z. Kovendi, I. Clitan, „*Modeling and simulation of a waste water neutralization system using (Mpdx) method*“, 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Cluj-Napoca, Romania, Electronic ISBN: 978-1-5386-2205-6
<https://ieeexplore.ieee.org/document/8402787/>
20. D. Sas, Z. Kovendi, I. Clitan, „*Numerical simulation of a wastewater neutralization system*“, 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Cluj-Napoca, Romania, Electronic ISBN: 978-1-5386-2205-6
<https://ieeexplore.ieee.org/document/8402788/>
21. T. Coloși, M. Abrudean, V. Mureșan, I. Clitan, D. Sas, M.-L. Ungureșan, „*Extension of Mpdx matrix for 4th order partial differential equations with two independent variables*“, 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Cluj-Napoca, Romania, Electronic ISBN: 978-1-5386-2205-6
<https://ieeexplore.ieee.org/document/8402789/>
22. T. Coloși, D. Sas, M. Man Dietrich, I. Clitan, Z. Kovendi, L. Coroiu, „*Extension of Mpdx Matrix for upper order Partial Differential Equations with two Independent Variables and Approximating Solutions*”, IEEE 2019 15th International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, Electronic ISBN: 978-1-7281-0773-8
<https://ieeexplore.ieee.org/document/8795214>
23. M. Man Dietrich, M. S. Popa, D. Sas, Z. Kovendi, E. I. Gergely, „*Implementation of the Quality management system in the Matlab software*”, IEEE 2019 15th International Conference on Engineering of Modern Electric Systems (EMES) Oradea, Romania, Electronic ISBN: 978-1-7281-0773-8
<https://ieeexplore.ieee.org/document/8795215>

D – Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

24. V.Muresan, M. Abrudean, M-L Ungureșan, I.Clitan, D.Sas, *Mathematical Modeling of a Three Separation Columns Cascade for ^{13}C Isotope Enrichment*, IEEE 2017 International Conference on Optimization of the Intelligent Systems and Their Applications in Aerospace, Robotics, Mechanical Engineering, Manufacturing Systems, Biomechatronics and Neurorehabilitation (OPTIROB), Jupiter, Romania

-
- 25. D. Sas, Control and Monitoring System for a Rubber Injection Press 2012 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Students Forum, 2012, Cluj–Napoca, România, ISBN: 978-973-662-731-6
 - 26. D. Sas, Fractional order controllers for first order systems 2012 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Students Forum, 2012, Cluj–Napoca, România, ISBN: 978-973-662-731-6
 - 27. D. Sas, FOPID Controller for DC Motor, Conferinta Studentilor ACSC 2013, Cluj–Napoca, România, ISSN–L: 2285 – 2166