

Rezultatele activităților de cercetare la nivel de departament DECIE în 2018

B. Cărți și capitole în cărți publicate în 2018

B1. Cărți și capitole în cărți de specialitate internaționale ca autor (cu ISBN extern)

1. Fernando Georgel Birleanu, Petre Angheliescu, Nicu Bizon, *Malicious and Deliberate Attacks and Power System Resiliency*, Fernando Georgel Birleanu, Petre Angheliescu, Nicu Bizon. *Malicious and Deliberate Attacks and Power System Resiliency*, Pages 223-246. In Naser Mahdavi Tabatabaei, Sajad Najafi Ravadanegh, Nicu Bizon. *Power Systems Resiliency: Modeling, Analysis and Practice*. Springer Verlag London Limited, 2018; eBook ISBN 978-3-319-94442-5, Hardcover ISBN 978-3-319-94441-8 <https://www.springer.com/in/book/9783319944418>, 2018, (TC_2_2018_DECIE)

2. Florentina Magda Enescu, Nicu, Bizon, Carmen Maria Moraru, *Issues in Securing Critical Infrastructure Networks for Smart Grid Based on SCADA, Other Industrial Control and Communication Systems*, Issues in Securing Critical Infrastructure Networks for Smart Grid Based on SCADA, Other Industrial Control and Communication Systems, Pages 289-324 In Naser Mahdavi Tabatabaei, Sajad Najafi Ravadanegh, Nicu Bizon. *Power Systems Resiliency: Modeling, Analysis and Practice*. Springer Verlag London Limited, 2018; eBook ISBN 978-3-319-94442-5, Hardcover ISBN 978-3-319-94441-8 <https://www.springer.com/in/book/9783319944418> ISBN/ISSN: 978-3-319-94441-8, 2018, (TC_5_2018_DECIE)

B2. Cărți și capitole în cărți de specialitate naționale ca autor (cu ISBN intern)

1. Enescu Fl., Hoarca C., *Grafica asistată de calculator*, Editura Matrix Rom, ISBN 978-606-25-0388-8, București, 2018 / Pg.118, 2018, (TC_10_2018_DECIE)

2. Teodorescu Rodica-Mihaela, *Aplicații în analiza și sinteza circuitelor*, ISBN: 978-606-560-596-1, nr. pag. 184, Editura Universității din Pitești, <http://biblioteca.upit.ro/>, 2018, (TC_2_2018_DECIE)

3. Grigore-Adrian Iordachescu, *Microunde – Teorie și Aplicații*, Editura Universității din Pitești, ISBN 978-606-560-595-4, 150 pagini, 2018, 2018, (TC_3_2018_DECIE)

4. Chiță, M.A., *Senzori și actuatori utilizați în procese industriale*, Editura MATRIX ROM, București, ISBN 973-606-25-0407-6, 145 pagini., 2018, (TC_4_2018_DECIE)

B5. Manuale didactice, suport de curs

1. Cioc Bogdan, *Masurari electrice si electronice -Suport de curs, fara ISBN, format electronic*, 2018

2. Cioc Bogdan, *Echipament electric si electronic auto - suport de curs, format electronic, fara ISBN*, 2018

3. Dumitru Cazacu, *Note de curs informatica aplicata*, 2018

4. Enescu Florentina Magda, *Sisteme avansate de baze de date - suport de curs*, 2018

5. Enescu Florentina Magda, *Baze de date - suport de curs*, 2018

6. Enescu Florentina Magda, *Managementul proiectelor de cercetare-dezvoltare - suport de curs*, 2018

7. Chita, M.A., *Senzori inteligenti - Note de curs*, 2018

B6. Îndrumare de laborator, culegere de probleme

1. M.A. Chita, *Senzori și actuatori - Îndrumar de laborator*, Senzori și actuatori - Îndrumar de laborator, Decembrie 2018, Editura MATRIXROM București, 114 pag., ISBN 978-606-25-0458-8, 2018

2. Cioc Bogdan, *Masurari electrice si electronice - Îndrumar de laborator, fara ISBN*, 2018

3. Enescu Florentina Magda, *Baze de date - îndrumar de laborator*, 2018

4. Enescu Florentina Magda, *Sisteme avansate de baze de date - îndrumar laborator*, 2018

C. Lucrări (articole) ISI / BDI publicate în 2018

C1. Articole în reviste cotate ISI Thomson Reuters

1. Bizon Nicu, Thounthong Phatiphat, *Fuel Economy using the Global Optimization of the Fuel Cell Hybrid Power Systems*, Energy Conversion and Management 2018:173:665-678. **impact factor 6.337**, <https://doi.org/10.1016/j.enconman.2018.08.015>, 2018, **WOS: 000445987300054** (TC_1_2018_DECIE)

2. Thounthong Phatiphat, Suwat Sikkabu, Nitchamon Poonnoy, Pongsiri Mungporn, Burin Yodwong, Poom Kumam, Nicu Bizon, Babak Nahid-Mobarakeh, Serge Pierfederici, *Nonlinear Differential Flatness-Based Speed/Torque Control With State-Observers of Permanent Magnet Synchronous Motor Drives*, IEEE Transactions on Industry Applications 2018;54(3):2874-2884. (May-June 2018) **Impact Factor: 2.743**, 10.1109/TIA.2018.2800678 **WOS:000433089200086**, 2018, (TC_16_2018_DECIE)
3. Bizon Nicu, Thounthong Phatiphat, *Real-time strategies to optimize the fueling of the fuel cell hybrid power source: A review of issues, challenges and a new approach*, Renewable & Sustainable Energy Reviews 2018;91:1089–1102 (August 2018), **Impact Factor: 9.184** <https://doi.org/10.1016/j.rser.2018.04.045> **WOS: 000434919600074**, 2018, (TC_9_2018_DECIE)
4. Bizon Nicu, *Real-time optimization strategy for fuel cell hybrid power sources with load-following control of the fuel or air flow*, Energy Conversion and Management 2018;157:13–27; **impact factor 6.337** <https://doi.org/10.1016/j.enconman.2017.11.084> **WOS:000425198700002** Published: FEB 2018, 2018, (TC_2_2018_DECIE)
5. Nicu Bizon, Gabriel Iana, Erol Kurt, Phatiphat Thounthong, Mihai Oproescu, Mihai Culcer, Mariana Iliescu, *Air Flow Real-Time Optimization Strategy for Fuel Cell Hybrid Power Sources with Fuel Flow Based On Load-Following*, Fuel Cell 2018;18(6):809-823 <https://doi.org/10.1002/fuce.201700197> **impact factor (IF): 2.149** **WOS:000451894900015**, 2018, (TC_24_2018_DECIE)
6. Nicu Bizon, Mihai Oproescu, *Experimental Comparison of Three Real-Time Optimization Strategies Applied to Renewable/FC-Based Hybrid Power Systems Based on Load-Following Control*, Journal - Energies 2018, 11, 3537; doi:10.3390/en11123537 Received: 19 November 2018; Accepted: 17 December 2018; Published: 19 December 2018, **Impact Factor: 2.676**, www.mdpi.com/journal/energies, 2018, **WOS:000455358300298** (TC_23_2018_DECIE)
7. Bizon Nicu, *Effective Mitigation of the Load Pulses by Controlling the Battery/SMES Hybrid Energy Storage System*, Applied Energy 2018;229:459-473. **Impact Factor: 7.900**, <https://doi.org/10.1016/j.apenergy.2018.08.013> 2018 **WOS: 000449891500037**, (TC_8_2018_DECIE)
8. Kurt Erol, Melih Kale Mustafa, Akbaba Sinan, Bizon Nicu, *Analytical and experimental studies on a new linear energy harvester*, Canadian Journal of Physics 2018 july. **Impact Factor: 0.983** ISSN 0008-4204, <https://doi.org/10.1139/cjp-2017-0708> **WOS:000437293500014**, 2018, (TC_20_2018_DECIE)
9. Nicu Bizon, Alin Gheorghita Mazare, Laurentiu Mihai Ionescu, Florentina Magda Enescu, *Optimization of the Proton Exchange Membrane Fuel Cell Hybrid Power System for Residential Buildings*, Energy Conversion and Management 2018;163:22–37; **Impact factor 6.377**, Q1, 1 May 2018 **WOS:000431837400003** <https://www.sciencedirect.com/science/article/pii/S0196890418301286>, 2018, (TC_9_2018_DECIE)
10. Bizon Nicu, *Optimal Operation of Fuel Cell / Wind Turbine Hybrid Power System under Turbulent Wind and Variable Load*, Applied Energy 2018;212:196-209 **Impact Factor: 7.900** <https://doi.org/10.1016/j.apenergy.2017.12.034> **WOS:000425200700014** Published: FEB 15, 2018, 2018, (TC_2_2018_DECIE)
11. Sanda Victorinne Paturca, Daniel George Petre, Cosmin Banica, Ana Maria Dumitrescu, George Seritan, Valeriu Bostan, Ionel Bostan, Sorin Grigorescu, Robert Beloiu, *Telerobots development in bio-engineering curricula – a creative design approach*, Journal of Biotechnology, Volume 280, Supplement, 30 August 2018, Pages S45 - S46, **FI = 2.533**, European Biotechnology Congress 2018, <https://doi.org/10.1016/j.jbiotec.2018.06.145>, <https://www.sciencedirect.com/science/article/pii/S0168165618303225>, 2018, **WOS: 000454825900142** (TC_2_2018_DECIE)
12. Nicu Bizon, Jose Manuel Lopez-Guedec, Erol Kurt, Phatiphat Thounthong, Alin Gheorghita Mazare, Laurentiu Mihai Ionescu, Gabriel Iana, *Hydrogen economy of the fuel cell hybrid power system optimized by air flow control to mitigate the effect of the uncertainty about available renewable power and load dynamics*, Energy Conversion and Management Journal, Volume 179, 1 January 2019, Pages 152-165, ISSN:0196-8904 DOI: <https://doi.org/10.1016/j.enconman.2018.10.058> <https://www.journals.elsevier.com/energy-conversion-and-management> <https://www.scijournal.org/impact-factor-of-ENERG-CONVERS-MANAGE.shtml> <https://www.scimagojr.com/journalsearch.php?q=29372&tip=sid&clean=0> **FI_2018=6.377**, 2018, **WOS:000451490200013** (TC_2_2018_DECIE)
13. M.A. Chiță, P. Schiopu, *Designed a position regulator for an actuator powered by a continuous current motor using the PIC16F73 microcontroller*, Revista "Scientific Bulletin", Series C, Electrical Engineering and Computer Science, UPB, ISSN 2286-3540, Issue2/2018, pp. 133-144. **WOS 000433442000011**, 2018, **IF=1,114** (TC_4_2018_DECIE)
14. N. Bizon, G. Iana, E. Kurt, P. Thounthong, M. Oproescu, M. Culcer, M. Iliescu, *Flow Real-time Optimization Strategy for Fuel Cell Hybrid Power Sources with Fuel Flow Based on Load-following*, Fuel Cell Journal, November 2018, Pages 809-823, ISSN: 1615-6846, Online ISSN:1615-6854 <https://doi.org/10.1002/fuce.201700197>

<https://onlinelibrary.wiley.com/journal/16156854>

<https://www.scijournal.org/impact-factor-of-FUEL-CELLS.shtml>

<https://www.scimagojr.com/journalsearch.php?q=26541&tip=sid&clean=0> **FI_2018 = 2.149**, 2018, **WOS: 000451894900015 (TC_14_2018_DECIE)**

C2. Articole în volume indexate ISI Proceedings

1. Adrian Ioan Lita, Daniel Alexandru Visan, Mirela Gherghe, Laurentiu Mihai Ionescu, Alin Gheorghita Mazare, Ioan Lita, *Microcontroller Based Magnetometer for Smart Meters Used in Electrical Energy Measurement*, 2018 41st International Spring Seminar on Electronics Technology (ISSE), Research and Development Tendencies in Advanced Electronics Technologies", Electronic ISSN: 2161-2536, ISBN: 978-866-022-042-6, pp. 1-4, DOI: 10.1109/ISSE.2018.8443693, <http://ieeexplore.ieee.org/>, Faculty of Technical Sciences, University of Novi Sad, Zlatibor, Serbia, 16-20 May 2018, 2018, **WOS: 000449866600067 (TC_4_2018_DECIE)**

2. Laurentiu-Mihai Ionescu, Alin Mazare, Daniel Visan, Nadia Belu, Adrian Lita, *Field Programmable Gates Array implementation of quantum computation structures*, 2018 41st International Spring Seminar on Electronics Technology (ISSE), Research and Development Tendencies in Advanced Electronics Technologies", Electronic ISSN: 2161-2536, ISBN:978-1-5386-5731-7; 978-3-319-73847-5, pp. 1-6, DOI: 10.1109/ISSE.2018.8443620, <http://ieeexplore.ieee.org/>, Faculty of Technical Sciences, University of Novi Sad, Zlatibor, Serbia, 16-20 May 2018., 2018, **WOS: 000449866600015 (TC_2_2018_DECIE)**

3. Daniel Alexandru Visan, Adrian Ioan Lita, Alin Gheorghita Mazare, Laurentiu Mihai Ionescu, Ioan Lita, *Digital Modem for Distributed Data Acquisition and Control Systems Used in Intensive Fruit Farming*, 2018 41st International Spring Seminar on Electronics Technology (ISSE), Research and Development Tendencies in Advanced Electronics Technologies", Electronic ISSN: 2161-2536, ISBN: 978-866-022-042-6, pp. 1-4, DOI: 10.1109/ISSE.2018.8443613, <http://ieeexplore.ieee.org/>, Faculty of Technical Sciences, University of Novi Sad, Zlatibor, Serbia, 16-20 May 2018, 2018, **WOS: 000449866600010 (TC_3_2018_DECIE)**

4. Alin Gh Mazare, Laurentiu M Ionescu, Daniel Visan, Adrian I Lita, Gheorghe Serban, *Embedded system for real time analysis of thermal images for prevention of water stress on plants*, 2018 41st International Spring Seminar on Electronics Technology (ISSE) , Conference Location: Zlatibor, Serbia, Serbia , Publisher: IEEE ,DOI: 10.1109/ISSE.2018.8443604 , Electronic ISBN: 978-1-5386-5731-7 , Date of Conference: 16-20 May 2018, 2018, **WOS: 000449866600001 (TC_25_2018_DECIE)**

5. Robert Beloiu, *Virtual solutions for industrial automation education*, <http://c3.icvl.eu/2018/proceedingsSI> Web of Sciences (Thomson Reuters): ICVL Proceedings of the 10th International Conference on Virtual LearningBook Series: Proceedings of the International Conference on Virtual learning;Edited by:Vlada, M; Albeanu, G; Adascalitei, A; Popovici, M; Accession Number: **WOS:000380576300002**; ISSN: 1844-8933Categories / Classification: Research Areas:Computer Science; Education & Educational ResearchWeb of Science Categories:Computer Science, Interdisciplinary Applications; Education & Educational Research, 2018, (TC_18_2018_DECIE)

C3. Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale

1. Laurențiu Mihai Ionescu, Alin Gheorghita Mazare, Gheorghe Șerban, Daniel Visan, Adrian Ioan Lita, *Intelligent command of an underground irrigation and fertilization system*, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packages - SIITME 2018, pp 306-309, ISBN: 978-1-5386-5577-1, DOI: 10.1109/SIITME.2018.8599255, <http://ieeexplore.ieee.org/>, "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Electronics and information Technology, Iasi, Romania, 25 – 28, October 2018, 2018, (TC_25_2018_DECIE)

2. Alin Gheorghita Mazare, Laurențiu Mihai Ionescu, Ioan Liță, Daniel Vișan, Nadia Belu, Mirela Gherghe, *Intelligent monitoring and planning system for herbicidal processes in agricultural crops*, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging (SIITME), Date of Conference: 25-28 Oct. 2018, Electronic ISBN: 978-1-5386-5577-1, Print on Demand(PoD) ISBN: 978-1-5386-5578-8, 2018, (TC_26_2018_DECIE)

3. Laurentiu Mihai Ionescu, Alin Mazare, Belu Nadia, Adrian Ioan Lita, Daniel Visan, Gheorghe Serban, *Intelligent Monitoring System To Combat Water Stress In Plant Crops*, ECAI 2018 INTERNATIONAL CONFERENCE 10th Edition, "Electronics, Computers and Artificial Intelligence" 28 – 30 June 2018, Iasi, ROMANIA, 2018, 2018, (TC_22_2018_DECIE)

4. Nicu Bizon, Mihai Oproescu, *Experimental Comparison of Three Real-Time Optimization Strategies Applied to Renewable/FC-Based Hybrid Power Systems Based on Load-Following Control*, Nicu Bizon, Mihai Oproescu. Experimental Comparison of Three Real-Time Optimization Strategies Applied to Renewable/FC-Based Hybrid Power

Systems Based on Load-Following Control. *Energies* 2018, 11(12), 3537-69; <https://doi.org/10.3390/en1123537> Impact Factor: 2.676; WOS (nu a aparut inca; punctajul este pentru ISI), 2018, (TC_9_2018_DECIE)

5. George Sisman, Nicu Bizon, Mihai Oproescu, *The importance of PLC in the predictive maintenance of electronic equipment*, ECAI 2018 - International Conference – 10th Edition , Electronics, Computers and Artificial Intelligence 28 June -30 June, 2018, Iasi, ROMANIA, 2018, (TC_1_2018_DECIE)

6. Nicu Bizon, Alin Gheorghita Mazare, Ionescu Mihai Laurentiu, Mihai Oproescu, Jose Manuel Lopez-Guede, Mihai Varlam, Mircea Raceanu and Ioan Cristian Hoarcă, *Renewable (REW) / Fuel Cell (FC) Hybrid Power System with mitigation of the REW variability by the FC fuel flow control*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence 28 June -30 June, 2018, Iasi, ROMANIA, 2018, (TC_1_2018_DECIE)

7. Mihai Oproescu, Vasile-Gabriel Iana, Mirel-Dorin Stanica, Mirela Gherghe, Ioan Lita, *Determining the Risk Level Regarding to the Positioning of an Exam Machine Used in the Nuclear Environment, based of polynomial regression*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence 28 June -30 June, 2018, Iasi, ROMANIA, 2018, (TC_1_2018_DECIE)

8. Rodica-Mihaela TEODORESCU, *VIRTUAL TOOL FOR THE DETERMINATION OF TIME ZONE DIFFERENCE*, International conference on Electronics, Computers and Artificial Intelligence – ECAI-2018, <http://ecai.ro/>, Series: Electronics, Computers and Artificial Intelligence, Vol. 10 – No.1/2018, ISSN – 1843-2115, ISBN 978-1-5386-4901-5, 28June-30June 2018, Iași., 2018, (TC_2_2018_DECIE)

9. Adrian Ioan Lita, Daniel Alexandru Visan, Laurentiu Mihai Ionescu, Alin Gheorghita Mazare, *Automated Testing System for Cable Assemblies Used in Automotive Industry*, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging (SIITME), Date of Conference: 25-28 Oct. 2018, Electronic ISBN: 978-1-5386-5577-1, Print on Demand(PoD) ISBN: 978-1-5386-5578-8, 2018, (TC_14_2018_DECIE)

10. Grigore-Adrian Iordachescu, *Arduino Based Polarization Detector for Microwave Frequencies*, ECAI 2018 - International Conference – 10th Edition, Electronics, Computers and Artificial Intelligence, 28 June - 30 June, 2018, Iasi, ROMANIA, in proces de a fi indexata IEEE Xplore Digital Library, DOI inca nealocat , 2018, (TC_3_2018_DECIE)

11. Daniel Alexandru Visan, Ioan Lita, Alin Gheorghita Mazare, Laurentiu Mihai Ionescu, *QPSK Transmission System for Machine to Machine Communication*, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging (SIITME), DOI: 10.1109/SIITME.2018.8599237, ISBN Information: Electronic ISBN: 978-1-5386-5577-1 Print on Demand(PoD) ISBN: 978-1-5386-5578-8, 2018, (TC_10_2018_DECIE)

12. M.A. Chiță, *Some aspects regarding vehicle safety control systems - keeping the laser distance telemetry brake distance*, International Journal of latest Trends in Engineering and Technoogy, Vol (9), Issue (1), pp. 234-240, DOI:<http://dx.doi.org/10.21172/1.91.36>, iSSN:2278-621X, Index Copernicus, CV 7.39/10, Global Impact Factor:0.685/1, Cosmos Impact factor4.490/10, 2018, (TC_4_2018_DECIE)

13. Rodica-Mihaela TEODORESCU, *DESIGNING AND TESTING OF THE 5TH ORDER CHEBYSHEV LC-LPF USING VIRTUAL METHODS*, University of Pitesti Scientific Bulletin, Series: Electronics and Computers Science, <https://sites.google.com/site/sciopiupit/>, Vol 18, Issue 1/2018, pg. 31-38, pISSN: 2344 – 2158 (old pISSN 1453-1119), eISSN: 2344 – 2166, Index Copernicus Journal Master List, graded with an ICV = 81.62 (2016); Genamics Database; CNCIS B+ category, 2018, (TC_4_2018_DECIE)

14. Rodica-Mihaela TEODORESCU, *DESIGNING AND TESTING BY VIRTUAL METHODS OF AN AMPLITUDE CORRECTOR CIRCUIT*, International conference on Electronics, Computers and Artificial Intelligence – ECAI-2018, <http://ecai.ro/>, Series: Electronics, Computers and Artificial Intelligence, Vol. 10 – No.1/2018, ISSN – 1843-2115, ISBN 978-1-5386-4901-5, 28June-30June 2018, Iași., 2018, (TC_4_2018_DECIE)

15. M.A. Chita, *Some aspects concerning a designin a temperature monitoring and control system in an enclosure using Peltier elements*, Book of abstract, The 42 ARA Congress, pp 28, 23-26 May, 2018, Universitatea Babeș-Bolyai, Cluj-Napoca, Romania, 2018, (TC_4_2018_DECIE)

16. M.A. Chita, *A Circuit for the Relative Humidity Measurement with Capacitive Sensor*, 2018. September: A Circuit for the Relative Humidity Measurement with Capacitive Sensor, M.A. Chita International Journal of Inovation in Engineering and Technology (IJET), <http://dx.doi.org/1021174>, Volume 11, Issue 2, September 2018, Impact factor: 0.672 Google Scholar Thomson Reuters WOSTeme: Sisteme de măsurare si procesare a semnalelor achizitionate, 100%DOI: 102117Nr autori: 1/1Indexat in WOS, baza de date INSPECAccession Number:INSPEC:8167579Document information:Accession Number:INSPEC:8167579ISSN 0035-4066Number of References:8Other Information:Practical, ExperimentalSICI 0035-4066(200207/09)47:3L:331:CRHM;1-V Teme: Sisteme de măsurare si procesare a semnalelor achizitionate, 100%Valoare: 0.00Nr autori: 1/1, 2018, (TC_4_2018_DECIE)

17. Florentina Magda Enescu, Nicu Bizon, Andrei Cirstea, Cosmin Stirbu, *Blockchain Technology Applied in Health. The Study of Blockchain Application in the Health System (I)*, ECAI 2018 - International Conference – 10th

Edition Electronics, Computers and Artificial Intelligence, 28 June -30 June, 2018, Iasi, ROMÂNIA, indexata IEEE Xplore., 2018, (TC_10_2018_DECIE)

18. Alexandru Nitu, Cosmin Stirbu, Florentina Magda Enescu, *Mobile application for a smart city*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence, 28 June -30 June, 2018, Iasi, ROMÂNIA, indexata IEEE Xplore, 2018, (TC_10_2018_DECIE)

19. Andrei Cirstea, Florentina Magda Enescu, Nicu Bizon, Cosmin Stirbu, Valeriu Manuel Ionescu, *Blockchain Technology Applied in Health. The Study of Blockchain Application in the Health System (II)*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence, 28 June -30 June, 2018, Iasi, ROMÂNIA, indexata IEEE Xplore., 2018, (TC_10_2018_DECIE)

20. Enescu Florentina – Magda, Hoarcă Cristian, Dumitrache Mihaela, *The study algorithms for the identification of the figures*, 17th International Multidisciplinary Scientific GeoConference SGEM 2018, www.sgem.org, SGEM2018, Albena, Bulgaria, ScopusDOI: 10.5593/sgem2018/61/S25.127, 2018, (TC_10_2018_DECIE)

21. Valeriu Manuel Ionescu and Florentina Magda Enescu, *The implementation of a software system for detecting a pattern in an ambient light sensor data stream*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence, 28 June -30 June, 2018, Iasi, ROMÂNIA, indexata IEEE Xplore. DOI: 978-1-5386-4901-5/18/\$31.00 ©2018 IEEE, 2018, (TC_10_2018_DECIE)

22. Gheorghe Grigoras, Nicu Bizon, Florentina Magda Enescu, José Manuel López Guede, Guadalupe Flores Salado, Raymond Brennan, Connie O'driscoll, Megersa Dinka and Mohamed Gar Alalm, *ICT based Smart Management Solution to Realize Water and Energy Savings through Energy Efficiency Measures in Water Distribution Systems*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence, 28 June -30 June, 2018, Iasi, ROMÂNIA, indexata IEEE Xplore. DOI: 978-1-5386-4901-5/18/\$31.00 ©2018 IEEE, 2018, (TC_10_2018_DECIE)

23. Corina Savulescu, *A Computer Tool for Statistical Analysis*, ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence 28 June -30 June, 2018, Iasi, ROMÂNIA, 2018, (TC_10_2018_DECIE)

24. Alexandru Ene, *A new method for the generation of test words in a typing learning program*, University of Pitesti, FECC, Pitesti, Romania ECAI 2018 - International Conference – 10th Edition Electronics, Computers and Artificial Intelligence 28 - 30 June, 2018, Iasi, ROMÂNIA, 2018, (TC_10_2018_DECIE)

25. Daniel-Constantin Anghel, Alexandru Ene, *Study of the influence of the technological parameters on the weld quality using artificial neural networks*, 22 International Conference on Innovative Manufacturing Engineering and Energy - IManE&E 2018, 2018, (TC_10_2018_DECIE)

26. Alexandru Ene, Daniel-Constantin Anghel, *A qualitative estimation of the influence of transport factors on the work efficiency*, 22 International Conference on Innovative Manufacturing Engineering and Energy - IManE&E 2018, 2018, (TC_10_2018_DECIE)

27. N Rachieru, N Belu, LM Ionescu, DC Anghel, *Using the decisions theory for establishing the site of a new manufacturing sector*, IOP Conference Series: Materials Science and Engineering, Volume 400, 6 - Management of Industrial Processes, ModTech 2018, 2018, (TC_10_2018_DECIE)

28. N Belu, LM Ionescu, AG Mazăre, N Rachieru, *Kanban system based on manufacturing equipment operation monitoring*, IOP Conference Series: Materials Science and Engineering, Volume 400, 6 - Management of Industrial Processes, ModTech 2018, 2018, (TC_10_2018_DECIE)

29. N. Belu, E.L. Nițu, A.D. Rizea, C.A. Gavriliuță, L.M. Ionescu, A. C. Gavriliuță, *Implementation of Single-Loop Kanban System Using Indoor Location Based on RFID*, Proceedings of the IVth International Congress of Automotive and Transport Engineering, pp.311-318, ISSN 978-606-737-314-1 (AMMA 2018 Technical University of Cluj-Napoca, 17-19 October 2018), 2018, (TC_10_2018_DECIE)

30. Silviu Ionita, *Modeling Human Sensory-Motor Action for Vehicle Braking Based on Fuzzy Inferences*, ECAI 2018 INTERNATIONAL CONFERENCE 10th Edition Electronics, Computers and Artificial Intelligence 28 June-30 June 2018 Iasi, ROMANIA, 2018, (TC_11_2018_DECIE)

31. Anghelescu Petre, Nicolaescu Stefan Vladimir, *Chatbot Application using Search Engines and Teaching Methods*, The 10th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2018, 28 June – 30 June 2018, Iasi, Romania., 2018, (TC_11_2018_DECIE)

32. Anghelescu Petre, Popa Andrei-Florin, *Design and Implementation of a Framework for a Social Network Application*, The 10th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2018, 28 June – 30 June 2018, Iasi, Romania., 2018, (TC_12_2018_DECIE)

33. Madalin Vasile Moise, Laurentiu Mihai Ionescu, Paul Mugur Svasta, *Comparison between deploying an IoT system designed to be used online and one designed to be used offline*, 2018 IEEE 24th International Symposium for

Design and Technology in Electronic Packaging (SIITME), Date of Conference: 25-28 Oct. 2018, Electronic ISBN: 978-1-5386-5577-1, Print on Demand(PoD) ISBN: 978-1-5386-5578-8, 2018, (TC_14_2018_DECIE)

34. Ursu, Doru ,Mariana Iorgulescu, *Power Systems Resilience Modeling, Analysis and Practice Editors: Mahdavi Tabatabaei, Naser, Najafi Ravadanegh, Sajad, Bizon, Nicu (Eds.)*, Power Systems Resilience Modeling, Analysis and Practice Editors: Mahdavi Tabatabaei, Naser, Najafi Ravadanegh, Sajad, Bizon, Nicu (Eds.) <https://www.springer.com/in/book/9783319944418> Chapter 13 "Continuity of Electricity Supply and Specific Indicators" Ursu, Doru ,Mariana Iorgulescu, pp 325-350, 2018, (TC_18_2018_DECIE)

35. Cristian Hoarcă, Ki-Yeol Shin, Luminita Mirela Constantinescu, Alexandru Bădiță, Laurențiu Pătularu, *PERFORMANCES COMPARISON FOR A PHOTOVOLTAIC SYSTEM BY USING THREE MAXIMUM POWER POINT TRACKING ALGORITHMS*, Progress of Cryogenics and Isotopes Separation, Volume 21, issue 1/2018: 67-74, http://icjcit-journal.icsi.ro/index.php?option=com_content&view=article&id=456:performances-comparison-for-a-photovoltaic-system-by-using-three-maximum-power-point-tracking-algorithms&catid=59: issue-12018-vol-21&Itemid=84 , 2018, (TC_18_2018_DECIE)

36. Ioan Cristian Hoarcă, Florentina Magda Enescu, Nicu Bizon, *Energy efficiency for renewable energy application*, Renewable Energy Sources and Clean Technologies 17th International Multidisciplinary Scientific GeoConference SGEM 2018, www.sgem.org, SGEM2018 , Albena, Bulgaria, ScopusDOI: 10.5593/sgem2018/61/S25.127, 2018, (TC_18_2018_DECIE)

37. Cristian Ioan Hoarcă, Florentina Magda Enescu, *On the energy efficiency of standalone fuel cell/renewable hybrid power sources Part II: Simulation results for variable load profile with different renewable energy sources profiles (RES)*, 14h International Conference on Applied and Theoretical Electricity UNIVERSITY OF CRAIOVA – Faculty of Electrical Engineering CRAIOVA, ROMANIA, October 4-6, 2018 IEEE Xplore: 29 November, 2018, (TC_18_2018_DECIE)

D. Lucrări (articole) publicate în 2018 în reviste și volume de conferințe cu referenți (neindexate)

D1. Articole în reviste

1. George RADUCU, Florin-Marian BIRLEANU, *Some aspects regarding the construction of a pushdown automata software editor and simulator*, University of Pitesti Scientific Bulletin. Series: Electronics and Computers Science, vol. 18, no. 1/2018, pp. 1-4, 2018, (TC_10_2018_DECIE)

2. Florin-Marian BIRLEANU, *CHDL1: Implementing a simplified version of the CompactHDL hardware description language*, Journal of Electrical Engineering, Electronics, Control and Computer Science (JEECCS), Volume 4, Issue 14, pp. 17-22, December 2018, 2018, (TC_10_2018_DECIE)

D2. Articole în volumele manifestărilor științifice

1. Adrian Ioan LITA, Daniel Alexandru VISAN, Laurentiu Mihai IONESCU, Alin Gheorghita MAZARE, *Temperature Control System for Accelerated Aging Tests on Printed Circuit Boards*, 10th International Conference on Electronics, Computers and Artificial Intelligence – ECAI 2018, Series Electronics, Computers and Artificial Intelligence, Vol. 10, No. 1, ISSN 1843 – 2115, ISBN: 978-1-5386-4900-8, "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Electronics and information Technology, Iasi, Romania, <http://ieeexplore.ieee.org/>, 28-30 June 2018, 2018, (TC_2_2018_DECIE)

2. Daniel Alexandru VISAN, Ioan LITA, Mariana JURIAN, Mirela GHERGHE, *Pseudorandom Sequence Generator for Spread Spectrum Communications*, 10th International Conference on Electronics, Computers and Artificial Intelligence – ECAI 2018, Series Electronics, Computers and Artificial Intelligence, Vol. 10, No. 1, ISSN 1843 – 2115, ISBN: 978-1-5386-4900-8, "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Electronics and information Technology, Iasi, Romania, <http://ieeexplore.ieee.org/>, 28-30 June 2018, 2018, (TC_3_2018_DECIE)

3. Mihai Oproescu, Ana Oproescu, Nicu Bizon, Gabriel Iana, *ROLE OF THE DEDICATED SOFTWARE APPLICATIONS IN EDUCATIONAL MANAGEMENT*, EDU WORLD 2018 - The 8th International Conference The European Proceedings of Social & Behavioural Sciences EpSBS, ISSN: 2357-1330, 2018, (TC_10_2018_DECIE)

4. Mihai Oproescu, Ana Oproescu, Nicu Bizon, Gabriel Iana, *SOFTWARE APPLICATIONS USED FOR THE EDUCATIONAL ACTIVITY MANAGEMENT OF STUDENTS*, EDU WORLD 2018 - The 8th International Conference The European Proceedings of Social & Behavioural Sciences EpSBS, 2018, (TC_10_2018_DECIE)

F. Granturi / proiecte de cercetare în 2018

F1. Granturi / proiecte câștigate prin competiție internațională (în derulare)

1. IONESCU LAURENTIU MIHAI, MAZARE ALIN GHEORGHITA, BIZON NICU, SERBAN GHEORGHE, LITA IOAN, OPROESCU MIHAI, BIRLEANU FLORIN MARIAN, IORDACHESCU GRIGORE ADRIAN, BELU NADIA, *Optimizarea costurilor la colectarea datelor de la contoarele inteligente si metode de imbunatatire a profitului la transportul energiei electrice (Cost-Efficient Data Collection for Smart Grid and Revenue Assurance)* - CARA_SG, Cod proiect ERANet SMartGri, Cod: Programul PN III – Cooperarea Europeană și Internațională – Subprogram 3.2 – Orizont 2020, ERANET, beneficiar: MINcom Smart Solutions GmbH, anul: 2018, domeniul stiintific: ERANET SMARTGRID, valoare: 83686.00, 2018, (TC_5_2018_DECIE)

F2. Granturi / proiecte câștigate prin competiție națională

1. BIZON NICU, OPROESCU MIHAI, BELOIU ROBERT, *Validarea experimentală a unui sistem de propulsie cu pile de combustibil cu hidrogen pentru un autovehicul ușor - Demonstrator de Mobilitate cu Hidrogen*, Validarea experimentală a unui sistem de propulsie cu pile de combustibil cu hidrogen pentru un autovehicul ușor - Demonstrator de Mobilitate cu Hidrogen, PN-III-P2-2.1-PED-2016-1223; director Mihai Varlam, Institutul National De Cercetare-Dezvoltare pentru Tehnologii Criogenice si Izotopice - I.C.S.I. Ramnicu Valcea; partener UNIVERSITATEA PITESTI, responsabil proiect: Nicu Bizon, nr. 53PED-2017 http://uefiscdi.gov.ro/userfiles/file/Inovare/Transfer%20la%20operatorul%20economic/Lista%20proiecte/Rezultate_finale_PTE.pdf 40000 lei (2018) Bizon Nicu, Oproescu Mihai, Beloiu Robert, 2018, (TC_23_2018_DECIE)

2. BIZON NICU, OPROESCU MIHAI, IONESCU LAURENTIU, MAZARE ALIN, CAZACU DUMITRU, CONSTANTINESCU LUMINITA MIRELA, *Concept Development of an Energy Storage Unit Using High Temperature Superconducting Coil for Spacecraft Power Systems*, Concept Development of an Energy Storage Unit Using High Temperature Superconducting Coil for Spacecraft Power Systems (SMESinSpace) (project's responsible) 176 STAR-2017 https://star.rosa.ro/downloads/C3_2016/CDI_final.pdf 60860 lei (2017) Bizon Nicu, Oproescu Mihai, Ionescu Laurentiu, Mazare Alin, Cazacu Dumitru, Constantinescu Luminita Mirela, 2018, (TC_24_2018_DECIE)

3. SOARE LILIANA CRISTINA, MAZARE ALIN GHEORGHITA, IONESCU LAURENTIU MIHAI, BIZON NICU, LITA IOAN, SERBAN GHEORGHE, OPROESCU MIHAI, ANGHELESCU PETRE, VISAN DANIEL ALEXANDRU, BELU NADIA, ANGHEL DANIEL CONSTANTIN, TOPALA CARMEN MIHAELA, SUTAN N, *PN-III-P1-1.2-PCCDI-2017-0332 "Creșterea capacității instituționale de cercetare bioeconomică pentru exploatarea inovatoare a resurselor vegetale autohtone, în vederea obținerii de produse horticole cu valoare adăugată ridicată"* – BIOHORTINOV /, Cod: PN-III-P1-1.2-PCCDI-2017, beneficiar: UPIT, anul: 2018, domeniul stiintific: Bioeconomie, valoare: 1533000.00, 2018, (TC_25_2018_DECIE)

4. IONITA SILVIU, IANA VASILE GABRIEL, CIOC ION BOGDAN, DOBRE RADUCU RAZVAN, *Senzori si sisteme integrate electronice si fotonice pentru securitatea persoanelor si a infrastructurilor (SENSIS)/ Contract: 71PCCDI/2018.*, Cod: PN-III-P1-1.2-PCCDI-2017-0419, beneficiar: Universitatea POLITEHNICA București, anul: 2018, domeniul stiintific: Spatiu și securitate/TIC, valoare: 36000.00, 2018, (TC_27_2018_DECIE)

Sinteza rezultatelor activităților de cercetare la nivel de departament DECIE în anul 2018

Categoria / subcategoria activității de cercetare științifică	2018	Total
B. Cărți și capitole în cărți		
B.1 de specialitate, internaționale (autor)	2	2
B.2 de specialitate, naționale (autor)	4	4
B.3 de specialitate, internaționale (editor)	0	0
B.4 de specialitate, naționale (editor)	0	0
B.5 Manuale didactice, suporturi de curs	7	7
B.6 Îndrumare de laborator, culegere de pb.	4	4
C. Lucrări (articole) ISI / BDI		
C.1 în reviste cotate ISI	14	14
C.2 în volume indexate ISI Proceedings	5	5
C.3 în reviste /volumele unor manifestări științifice indexate BDI	37	37
D. Lucrări (articole) neindexate		
D.1 în reviste	2	2
D.2 în volumele manifestărilor științifice	4	4
E. Brevete de invenție	0	0
F. Granturi / proiecte de cercetare		
F.1 câștigate prin competiție internațională	1	1
F.2 câștigate prin competiție națională	4	4
F.3 cu mediul socio-economic	0	0

Data: 30.01.2019

*Director de departament DECIE
Prof.univ.dr.ing. Gheorghe ȘERBAN*

Semnătura