

**LISTA DE LUCRĂRI**  
**a cadrului didactic IONESCU LAURENTIU MIHAI**

**A. Teza de doctorat**

*Modelarea, proiectarea, simularea și implementarea de microstructuri hardware evolutive*, Doctor in Inginerie Electronica si Telecomunicatii, Calculatoare, tehnologia informației, 2007

**B. Cărți și capitole în cărți publicate în perioada 2012 - 2022**

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

1. Laurentiu Ionescu, Alin Mazare, Gheorghe Serban, *Intrinsic Evolvable Hardware Used for Fault Tolerance Systems*, Book International Journal of Organizational and Collective Intelligence , IGI Global, Vol. 3, Issue 2, Article 2, (pp.43-80), 3(2), 43-80, April-June 2012, DOI: 10.4018/joci.2012040102, DOI: 10.4018/IJOCI, ISSN: 1947-9344, EISSN: 1947-9352, 2012, 2012, (TC\_9\_2012\_DECIE, TC\_9\_2012\_DECIE)

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

1. Laurențiu-Mihai Ionescu, Alin Mazăre, *Aplicații cu circuite reconfigurabile*, ISBN: 978-606-560-445-2, Ed. Universității din Pitești, 2015, 2015, (TC\_9\_2015\_DECIE, TC\_9\_2015\_DECIE)
2. Alin-Gheorghita Mazare, Laurențiu-Mihai Ionescu, *Tehnici CAD – Îndrumar de laborator*, ISBN: 978-606-560-444-5, Ed. Universității din Pitești, 2015, 2015, (TC\_9\_2015\_DECIE, TC\_9\_2015\_DECIE)

**B5. Manuale didactice, suport de curs**

1. Laurentiu Ionescu, *Proiectarea de aplicații în timp real*, Note de curs, Universitatea din Pitesti, 2016, 2016
2. Laurentiu Ionescu, *Sisteme de control în timp real*, Note de curs, Universitatea din Pitesti, 2016, 2016

**B6. Îndrumare de laborator, culegere de probleme**

1. Gheorghe Serban, Laurentiu Ionescu, *Calculatoare numerice – Indrumar de laborator*, Indrumar de laborator, Universitatea din Pitesti, 2016, 2016
2. Gheorghe Serban, Laurentiu Ionescu, *Structura si organizarea calculatoarelor – Indrumar de laborator*, Indrumar de laborator, Universitatea din Pitesti, 2016, 2016

**C. Lucrări (articole) ISI / BDI publicate în perioada 2012 - 2022**

**C1. Articole în reviste cotate ISI Thomson Reuters**

1. Gheorghe Serban, Laurentiu Ionescu, Alin Mazare, *The possibility of optimisation for power supply consumption using evolvable power regulator*, Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique, Tome 57, 2012, No 2, Avril-Juin, pp.222-231, ISSN: 0035-4066 FI 0.47, 2012, (TC\_9\_2012\_DECIE, TC\_9\_2012\_DECIE)

2. Nicu Bizon, Alin Gheorghita Mazare, Laurențiu Mihai Ionescu, Florentina Magda Enescu, *Optimization of the Proton Exchange Membrane Fuel Cell Hybrid Power System for Residential Buildings*, ENERGY CONVERSION AND MANAGEMENT, Volume: 163, Pages: 22-37, DOI: 10.1016/j.enconman.2018.02.025, Published:MAY 1 2018, Document Type:Article, FI 2017 :6.377, 2018, (TC\_25\_2018\_DECIE)

3. Nicu Bizon, Jose Manuel Lopez-Guede, Erol Kurt, Phatiphat Thounthong, Alin Gheorghita Mazare, Laurențiu 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, Volume: 179, Pages: 152-165, DOI: 10.1016/j.enconman.2018.10.058, Published: JAN 1 2019, 2019, (TC\_9\_2019\_DECIE)

4. Bizon Nicu, Mazare Alin Gheorghita, Ionescu Laurentiu Mihai, Thounthong Phatiphat, Kurt Erol, Oproescu Mihai, Serban Gheorghe, Lita Ioan, *Better Fuel Economy by Optimizing Airflow of the Fuel Cell Hybrid Power Systems Using Fuel Flow-Based Load-Following Control*, Domeniu raportare ENERGIES, Volume: 12, Issue: 14, Article Number: 2792, Published: JUL 2 2019 DOI: 10.3390/en12142792, ISSN: 1996-1073, FI. 2018: 2,707 , 2019, (TC\_9\_2019\_DECIE, TC\_1\_2019\_DECIE)

5. Laurentiu-Mihai Ionescu, Nicu Bizon, Alin-Gheorghita Mazare, Nadia Belu, *Reducing the Cost of Electricity by Optimizing Real-Time Consumer Planning Using a New Genetic Algorithm-Based Strategy*, Mathematics 2020, 8(7), 1144; <https://doi.org/10.3390/math8071144>, 2020, (TC\_16\_2020\_DECIE, TC\_15\_2020\_DECIE)

6. Monea, C, Iana, GV, Ionita, S, Ionescu LM, Zaharia, SA, Ilie, S, Bizon, N, *An optimized NQR spectrometer for detection of prohibited substances*, MEASUREMENT, Volume: 151, Article Number: 107158, DOI: 10.1016/j.measurement.2019.107158, 2020, (TC\_15\_2020\_DECIE)

## C2. Articole în volume indexate ISI Proceedings

1. G. Ţerban, C. Anton, L. Ionescu, I. Tutănescu, A. Mazăre, *H-ARQ System for real time Error Detection and Correction based on Hardware Associative Memories*, International Conference on Applied Electronics AE'2012, 5-7 September, 2012, Pilzen, Czech Republic, lucrare publicata in Conference Proceedings ISSN 1803-7232, 2012, (TC\_9\_2012\_DECIE, TC\_9\_2012\_DECIE)

2. Anton Constantin, Ionescu Laurentiu, Tutanescu Ion, Mazare Alin, Serban Gheorghe, Oprea Adriana, *An Error Detection and Correction System based on Associative Memories*, 2012 20th Telecommunications Forum (TELFOR), ISBN: 978-1-4673-2984-2, p.568-571, Belgrade, Serbia, November, 20-22, 2012, (TC\_9\_2012\_DECIE, TC\_9\_2012\_DECIE)

3. Ionescu, L., Anton, C., Tutănescu, I., Mazăre, A., Ţerban, G., *Error correction and detection system based on Hopfield networks*, 2012 International Conference for Internet Technology and Secured Transactions, ICITST 2012, Article number 6470868, Pages 541-544, ISBN: 978-190832008-7, 2012, (TC\_9\_2012\_DECIE, TC\_9\_2012\_DECIE)

4. Barbu V. ,Ionescu L. ,Mazare A. ,Serban G., *Evolvable Hardware Used in Heliostatic Field Tracker System Control*, 2013 International Conference on Applied Electronics, Pilsen 10 – 12 September 2013, 29-33, ISSN 1803-7232 (Print) ISSN 1805-9597 (Online), ISBN 978-80-261-0166-6, 2013, (TC\_9\_2013\_DECIE, TC\_9\_2013\_DECIE)

5. Anton, C. ,Ionescu, L. ,Tutanescu, I. ,Mazare, A. ,Serban, G., *Error detection and correction using LDPC in parallel Hopfield networks*, 4th International Symposium on Electrical and Electronics Engineering (ISEEE), 2013, 11-13 Oct. 2013, INSPEC Accession Number:13936656 , 10.1109/ISEEE.2013.6674380, 2013, (TC\_9\_2013\_DECIE, TC\_9\_2013\_DECIE)

6. Anton C., Ionescu L. Mazăre A., Tutănescu I., Serban G., *Errors correction with optimised Hopfield neural networks*, Telecommunications Forum (TELFOR), 2013 21st, 25-28 nov. 2013, ISBN 978-1-4799-1419-7 , pp. 393 – 396, 2013, 2013, (TC\_9\_2013\_DECIE, TC\_9\_2013\_DECIE)

7. A Mazare, L Ionescu, G Serban, I Lita, *FPGA-based system for data acquisition and remote communication*, Design and Technology in Electronic Packaging (SIITME), 2014 IEEE 20th International Symposium for, 169-174, DOI: 10.1109/SIITME.2014.6967019, 2014, 2014, (TC\_9\_2014\_DECIE, TC\_9\_2014\_DECIE)

8. LM Ionescu, A Mazare, C Anton, C Stoian, *The hardware implementation of a quantum computation system emulator*, Applied Electronics (AE), 2014 International Conference on, ISSN 1803-7232, ISBN 978-8-0261-0276-2, 121 – 124, 2014, 2014, (TC\_15\_2014\_DECIE, TC\_15\_2014\_DECIE)

9. Misztal, A, Butlewski, M, Belu, N, Ionescu, LM, *Creating involvement of production workers by reliable technical maintenance*, 2014 International Conference On Production Research - Regional Conference Africa, Europe And The Middle East And 3rd International Conference on Quality and Innovation in Engineering and Management (Icpr-Aem 2014), pp. 322-327, ISBN:978-973-662-978-5, 2014, 2014, (TC\_6\_2014\_DECIE, TC\_6\_2014\_DECIE)

10. A. Mazare, L.M. Ionescu, A.I. Lita, G. Serban, *Real Time System for Image Acquisition and Pattern Recognition Using Boolean Neural Network*, 38th International Spring Seminar on Electronics Technology "Novel Trends in Electronics Manufacturing", Edger, Hungary, 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

11. L.M. Ionescu, A. Mazare, A.I. Lita, G. Serban, *Fully Integrated Artificial Intelligence Solution for Real Time Route Tracking*, 38th International Spring Seminar on Electronics Technology "Novel Trends

in Electronics Manufacturing" ISSE, Edger, Hungary, 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

12. Belu, L.M. Ionescu, A. Misztal, A. Mazare, *Poka Yoke system based on image analysis and object recognition*, Modern Technologies in Industrial Engineering ModTech, Mamaia Romania, MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING (MODTECH2015) Book Series: IOP Conference Series-Materials Science and Engineering Volume: 95 Article Number: 012138, 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

13. Berechet, V.A. ; Ionescu, L.M. ; Mazare, A.G. ; Lita, I., *Real time PCB diagnosis using FPGA - implemented video analysis tool*, 2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging (SIITME), pp. 201-205, DOI:10.1109/SIITME.2015.7342323, Brasov, Romania 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

14. Ionescu, L.M., Mazare, A.G., Berechet, V.A., Lita, I., *Real - time system for shape extraction from an image*, 2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging (SIITME), pp. 205 – 208, DOI:10.1109/SIITME.2015.7342324, Brasov, Romania 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

15. Mazare, A., Ionescu, L.-M. , Lita, A.-I. , Serban, G. , Ionut, M, *Mobile system with real time route learning using Hardware Artificial Neural Network*, 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), pp. 45-48, DOI:10.1109/ECAI.2015.7301250, ISBN 978-1-4673-6646-5 , Bucharest, Romania, June, 2015, 2015, (TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE, TC\_7\_2015\_DECIE, TC\_9\_2015\_DECIE)

16. Adrian Ioan Lita, Laurentiu Mihai Ionescu, Alin Gheorghita Mazare, Gheorghe Serban, Ioan Lita, *Real time system for instrumental sound extraction and recognition*, Electronics Technology (ISSE), 2016 39th International Spring Seminar on, pp. 456-461, Electronic ISSN: 2161-2064, 2016, 2016, (TC\_7\_2016\_DECIE, TC\_9\_2016\_DECIE, TC\_7\_2016\_DECIE, TC\_9\_2016\_DECIE)

17. Nadia Belu, Agnieszka Misztal, Laurentiu Mihai Ionescu, *Quality Assurance Matrix as the advanced generation of quality control*, International Conference on Economics and Management Innovations (ICEMI 2016), 2016, 2016, (TC\_6\_2016\_DECIE, TC\_6\_2016\_DECIE)

18. LM Ionescu, N Belu, N Rachieru, AG Mazăre, DC Anghel, *Monitoring of manufacturing processes in the automotive industry using indoor location system*, IOP Conference Series: Materials Science and Engineering, Vol. 145, Issue 2, Pp. 022020, doi:10.1088/1757-899X/145/2/022020, 2016, 2016, (TC\_9\_2016\_DECIE, TC\_9\_2016\_DECIE)

19. V. Nicolae, L. M. Ionescu , N. Belu, L. E. Știrbu, *Improvement of the 8D Analysis Through a System Based on the &ldquo;Internet of Things&rdquo; Concept Applied in Automotive Industry*, CONAT 2016 International Congress of Automotive and Transport Engineering, pp 635-642, 2016, doi:10.1007/978-3-319-45447-4\_70, Editor Springer International Publishing. (BDI: Springerlink), 2016, (TC\_6\_2016\_DECIE, TC\_9\_2016\_DECIE, TC\_6\_2016\_DECIE, TC\_9\_2016\_DECIE)

20. L. M. Ionescu, A. Gh. Mazare, I. Lita, N. Belu, A-I. Lita, *Real time system for extraction and playback of an instrumental sound*, 2016 IEEE 22nd International Symposium for Design and Technology in Electronic Packaging (SIITME), Oradea, Romania, 2016, pp. 86-89. doi: 10.1109/SIITME.2016.7777250. (BDI: IEEE Xplore), 2016, (TC\_9\_2016\_DECIE, TC\_9\_2016\_DECIE)

21. Visan, Daniel Alexandru; Ionescu, Laurentiu Mihai; Lita, Adrian Ioan, Alin Mazare, *Remote Communication Interface for Sound and Vibration Sensors*, 2016 IEEE 22nd International Symposium for Design and Technology in Electronic Packaging (SIITME), Oradea, Romania, 2016, pp. 90-93. doi: 10.1109/SIITME.2016.7777250. (BDI: IEEE Xplore), 2016, (TC\_9\_2016\_DECIE, TC\_9\_2016\_DECIE)

22. Visan, Daniel Alexandru; Jurian, Mariana; Cioc, Ion Bogdan; Ionescu, Laurentiu Mihai; Lita, Adrian Ioan, *Delta Encoder for Fiber Optic Based Data Transmission of Signals from Sensors*, 2016 8TH INTERNATIONAL CONFERENCE ON ELECTRONICS, COMPUTERS AND ARTIFICIAL INTELLIGENCE (ECAI), Book Series: International Conference on Electronics Computers and Artificial Intelligence, Published: 2016, ISBN:978-1-5090-2047-8, ISSN: 2378-7147, 2016, 2016, (TC\_9\_2016\_DECIE, TC\_9\_2016\_DECIE)

23. Daniel Alexandra Visan; Laurentiu Mihai Ionescu; Alin Gheorghita Mazare; Adrian Ioan Lita, *Line encoder with serial data transmission for automotive applications*, 2017 IEEE 23rd International Symposium for Design and Technology in Electronic Packaging (SIITME) Pages: 349 - 352Date Added to IEEE Xplore: 18 January 2018DOI: 10.1109/SIITME.2017.8259922, 2017, (TC\_16\_2017\_DECIE)

24. Laurentiu Mihai Ionescu; Alin Gheorghita Mazare; Adrian Ioan Lita; Daniel Alexandru Visan; Gheorghe Serban; Nadia Belu; A. Sanmarghitian; T. Goeller; S. Balauta, *Current consumption monitoring and analysis system for energy management improvement in an industrial complex*, 2017 IEEE 23rd International Symposium for Design and Technology in Electronic Packaging (SIITME) Pages: 286 – 291Date Added to IEEE Xplore: 18 January 2018DOI: 10.1109/SIITME.2017.8259909, 2017, (TC\_16\_2017\_DECIE)
25. Adrian Ioan Lita; Daniel Alexandru Visan; Alin Gheorghita Mazare; Laurentiu Mihai Ionescu, *Door automation system for smart home implementation*, 2017 IEEE 23rd International Symposium for Design and Technology in Electronic Packaging (SIITME) Pages: 345 - 348Date Added to IEEE Xplore: 18 January 2018DOI: 10.1109/SIITME.2017.8259925, 2017, (TC\_16\_2017\_DECIE)
26. Alin Gheorghita Mazare; Laurentiu Mihai Ionescu; Daniel Alexandru Visan; Nadia Belu; Ioan Lita; T. Eilks; V. Stan; C. Colceriu, *Intelligent system for determining the consumer profile and generate alarm in case of significant deviations from the profile*, 2017 IEEE 23rd International Symposium for Design and Technology in Electronic Packaging (SIITME) Pages: 361 - 366Date Added to IEEE Xplore: 18 January 2018DOI: 10.1109/SIITME.2017.8259926, 2017, (TC\_16\_2017\_DECIE)
27. Mazare, A. G; Belu, N.; Ionescu, L. M.; Rachieru, N.; Misztal, A., *Non-invasive system for monitoring of the manufacturing equipment*, MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING VBook Series: IOP Conference Series-Materials Science and Engineering, Volume: 227,DOI: 10.1088/1757-899X/227/1/012078, Published: 2017, ISSN: 1757-8981, 2017, (TC\_7\_2017\_DECIE, TC\_7\_2017\_DECIE)
28. Ionescu, L. M. ; Mazare, A. ; Serban, G. ; Ionita, S, *Real time monitoring system used in route planning for the electric vehicle*, INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING - MOBILITY ENGINEERING AND ENVIRONMENT (CAR2017)Book Series: IOP Conference Series-Materials Science and Engineering, Volume: 252, Article Number: UNSP 012095, DOI: 10.1088/1757-899X/252/1/012095, Published: 2017ISSN: 1757-8981, 2017, 2017, (TC\_7\_2017\_DECIE, TC\_7\_2017\_DECIE)
29. Laurentiu Mihai Ionescu ; Alin Mazare ; Mihai Oproescu ; Ioan Lita ; Gheorghe Serban ; Belu Nadia, *Electricity consumption measurement system for detecting losses occurring in power transmission networks*, Published in: Electronics, Computers and Artificial Intelligence (ECAI), 2017 9th International Conference on, Date of Conference: 29 June-1 July 2017, Date Added to IEEE Xplore: 07 December 2017, Electronic ISBN: 978-1-5090-6458-8Print ISBN: 978-1-5090-6457-1USB ISBN: 978-1-5090-6456-4Print on Demand(PoD) ISBN: 978-1-5090-6459-5DOI: 10.1109/ECAI.2017.8166469, 2017, (TC\_7\_2017\_DECIE)
30. Daniel Alexandru Visan ; Ioan Lita ; Laurentiu Mihai Ionescu ; Ion Bogdan Cioc, *Simulation and implementation of a pulse position modulator for short-range optical communication systems*, Published in: Electronics Technology (ISSE), 2017 40th International Spring Seminar on, Date of Conference: 10-14 May 2017Date Added to IEEE Xplore: 08 August 2017Electronic ISBN: 978-1-5386-0582-0Print on Demand(PoD) ISBN: 978-1-5386-0583-7Electronic ISSN: 2161-2536DOI: 10.1109/ISSE.2017.8000958, 2017, (TC\_13\_2017\_DECIE)
31. 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) , DOI: 10.1109/ISSE.2018.8443693 , Conference Location: Zlatibor, Serbia, Serbia , Electronic ISBN: 978-1-5386-5731-7 , DOI: 10.1109/ISSE.2018.8443693 , Date of Conference: 16-20 May 2018, 2018, (TC\_22\_2018\_DECIE)
32. 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), Conference Location: Zlatibor, Serbia, Serbia , DOI: 10.1109/ISSE.2018.8443613 , Electronic ISBN: 978-1-5386-5731-7 , Date of Conference: 16-20 May 2018, 2018, (TC\_25\_2018\_DECIE)
33. 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) , Publisher: IEEE ,Conference Location: Zlatibor, Serbia, Serbia , DOI: 10.1109/ISSE.2018.8443620 , Electronic ISBN: 978-1-5386-5731-7, 2018, (TC\_22\_2018\_DECIE)

34. 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, (TC\_25\_2018\_DECIE)
35. Adrian Ioan LITA, Daniel Alexandru VISAN, Laurentiu Mihai IONESCU, Alin Gheorghita MAZARE, *Temperature Control System for Accelerated Aging Tests on Printed Circuit Boards*, PROCEEDINGS OF THE 2018 10TH INTERNATIONAL CONFERENCE ON ELECTRONICS, COMPUTERS AND ARTIFICIAL INTELLIGENCE (ECAI)Book Group Author(s):IEEEBook Series: International Conference on Electronics Computers and Artificial IntelligencePublished: 2018ISBN:978-1-5386-4901-5ISSN: 2378-7147, 2018, (TC\_5\_2018\_DECIE)
36. Laurentiu-Mihai Ionescu, Alin Mazare, Daniel Visan, Gheorghe Serban, Belu Nadia, Adrian Lita, *Intelligent Monitoring System To Combat Water Stress In Plant Crops*,, Conference: 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)Location: Iasi, ROMANIADate: JUN 28-30, 2018Sponsor(s):IEEE Romania Sect; IEEE Ind Applicat Soc; Univ Pitesti; Guvernul Romaniei; Univ Pitesti, Fac Electronica Comunicatii CalculatoareISBN:978-1-5386-4901-5ISSN: 2378-7147, 2018, (TC\_5\_2018\_DECIE)
37. 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)
38. 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)
39. 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)
40. 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)
41. 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)
42. Laurentiu Mihai Ionescu, Alin Gheorghita Mazare, Gheorghe Serban, 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 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\_22\_2018\_DECIE, TC\_25\_2018\_DECIE)
43. Alin Gheorghită Mazăre, Laurențiu Mihai Ionescu, Loan 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\_22\_2018\_DECIE, TC\_26\_2018\_DECIE)
44. Ioan LITA, Daniel Alexandru VISAN, Laurentiu Mihai IONESCU, Alin Gheorghita MAZARE, *Color-Based Sorting System for Agriculture Applications*, 11th International Conference on Electronics, Computers and Artificial Intelligence – ECAI 2019ISBN 978-1-7281-1624-2ISSN 2378-7147, 2019, (TC\_16\_2019\_DECIE)
45. Daniel Alexandru VISAN, Mariana Jurian, Ioan LITA, Laurentiu Mihai IONESCU, Alin Gheorghita MAZARE, *Direct Sequence Spread Spectrum Communication Module for Efficient Wireless*

*Sensor Networks*, 11th International Conference on Electronics, Computers and Artificial Intelligence – ECAI 2019 ISBN 978-1-7281-1624-2 ISSN 2378-7147, 2019, (TC\_16\_2019\_DECIE)

46. Laurentiu-Mihai Ionescu, Alin Gheorghita Mazare, Gheorghe Serban, Lita Ioan, Daniel Visan, *A solution to implement Grover quantum computation algorithm using the binary representation of the phase on the FPGA*, International Conference – 11th Edition Electronics, Computers and Artificial Intelligence 27 June -29 June, 2019, Pitesti, ROMÂNIADOI: 978-1-7281-1624-2/19/\$31.00 ©2019 IEEE, 2019, (TC\_26\_2019\_DECIE)

47. N Belu, LM Ionescu, N Rachieru, *Risk-cost model for FMEA approach through Genetic algorithms–A case study in automotive industry*, IOP Conference Series: Materials Science and Engineering, 23rd International Conference on Innovative Manufacturing Engineering and Energy (IManEE), DOI10.1088/1757-899X/564/1/012102, 2019, (TC\_15\_2019\_DECIE)

48. N Belu, EL Nitu, AC Gavriluta, LM Ionescu, *An approach with genetic algorithms to improve the workstation space planning*, IOP Conf. Ser.: Mater. Sci.

Eng. 591 012002DOI: <https://doi.org/10.1088/1757-899X/591/1/012002>, 2019, (TC\_15\_2019\_DECIE)

49. Ionescu LM., Mazare AG., Serban G., Chitu E., Lita AI, *Intelligent monitoring and analysis system of soil moisture parameters and trunk diameter used in fruit tree culture*, 2019 IEEE 25TH INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME 2019) Book Series International Symposium for Design and Technology in Electronic Packaging Page 256-259 Published 2019 ISBN 978-1-7281-3330-0 ISSN 2641-287X, 2019, (TC\_16\_2019\_DECIE, TC\_9\_2019\_DECIE)

50. Lita, I, Visan DA, Mazare AG., Ionescu LM, *Solar Tracker for Autonomous Power Supplying of Electronic Systems Used in Precision Agriculture*, 2019 IEEE 25TH INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME 2019) Book Series International Symposium for Design and Technology in Electronic Packaging Page 82-85 Published 2019 ISBN 978-1-7281-3330-0 ISSN 2641-287X, 2019, (TC\_9\_2019\_DECIE)

51. Mazare, AG, Ionescu, LM, Visan, D, Belu, N, Lita, AI, *Pests detection system for agricultural crops using intelligent image analysis*, 2019 IEEE 25TH INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME 2019) Book Series International Symposium for Design and Technology in Electronic Packaging Page 228-231 Published 2019 ISBN 978-1-7281-3330-0 ISSN 2641-287X, 2019, (TC\_9\_2019\_DECIE, TC\_16\_2019\_DECIE)

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

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#### E. Brevete de invenție obținute în întreaga activitate

1. Silviu Ionita, Alin Mazare, Laurentiu Ionescu, Petre Angheluș, *Sistem cu radio-releu translator programabil pentru telecomenzi în IR*, Sistem cu radio-releu translator programabil pentru telecomenzi în IR, Silviu Ionita, Alin Mazare, Laurentiu Ionescu, Petre Angheluș (System with programmable translating radio-rely for IR remote control), Brevet de inv.RO 126719B1/30.10.2017BOPI 10/2017, 2017, (TC\_2\_2017\_DECIE, TC\_2\_2017\_DECIE)

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#### F. Granturi / proiecte de cercetare începând din 2012 - 2022

##### F1. Granturi / proiecte câștigate prin competiție internațională

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2. *Concept Development of an Energy Storage Unit Using High Temperature Superconducting Coil for Spacecraft Power Systems (SMEsInSpace)*, IONESCU LAURENTIU MIHAI, BIZON NICU, OPROESCU MIHAI, IONESCU LAURENTIU MIHAI, MAZARE ALIN GHEORGHITA, CAZACU DUMITRU, CONSTANTINESCU LUMINITA MIRELA, Cod: CDI STAR, beneficiar: European Space Agency within STAR (Space Technology and Advanced Research), anul: 2017, domeniul științific: Technology & Science Support, valoare: 40887.00, 2017, 40887.00, (TC\_9\_2017\_DECIE)

##### F2. Granturi / proiecte câștigate prin competiție națională

1. IONESCU LAURENTIU MIHAI, 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, PN-III-P1-1.2-PCCDI-2017-0332

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Bioeconomie, valoare: 1533000.00, 2018, (TC\_26\_2018\_DECIE)*

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beneficiar: UEFISCDI, anul: 2019, domeniul științific: Bioeconomie, valoare: 1248300.00, 2019,  
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GHEORGHITA, BIZON NICU, LITA IOAN, ANGHELESCU PETRE, OPROESCU MIHAI, BELU  
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domeniul științific: Bioeconomie, valoare: 1382700.00, 2020, (TC\_9\_2020\_DECIE)

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GHEORGHITA, BIZON NICU, LITA IOAN, ANGHELESCU PETRE, OPROESCU MIHAI, BELU  
NADIA, *Cuantificarea multisenzorială a stresului hidric și biocenotic din pomicultură și viticultură prin fitomonitorizare și avertizare timpurie în condițiile schimbărilor climatice (QM\_WABISPOMVIT')*, Cod:  
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**Data: 19.09.2022**

**Cadrul didactic IONESCU LAURENTIU MIHAI**  
**Semnătura**