

**UNIVERSITATEA din Pitești**

**Facultatea de Electronica, Comunicatii si Calculatoare**

**Departamentul de Electronica, Calculatoare si Inginerie Electrica**

## **Rezultatele activităților de cercetare la nivel de departament în anul 2012**

### **I. Cărți și capitole în cărți publicate în anul 2012**

#### **I.1. Cărți și capitole în cărți de specialitate internaționale ca autor (cu ISBN extern)**

1. Nicu Bizon, Marian Raducu, Mihai Oproescu, *Chapter 12. Energy Efficiency of the Hybrid Power Source Used in the Plug-In Fuel Cell Vehicles*, Chapter 12. Energy Efficiency of the Hybrid Power Source Used in the Plug-In Fuel Cell Vehicles, pp.313-352 In N. Bizon, L. Dascalescu, and N. M. Tabatabaei (Ed.), 2014, Autonomous Vehicles: Intelligent Transport Systems and Smart Technologies, Nova Science Publishers Inc., USA, ISBN: 978-1-63321-324-1, 541 pages,, 2012, (TC\_5\_2012\_DECIE, TC\_11\_2012\_DECIE)

2. Nicu Bizon, *Techniques to Mitigate the Fuel Cell Current Ripple*, Nicu Bizon, Chapter 9. Techniques to Mitigate the Fuel Cell Current Ripple, pp. 369-421 In N. Bizon (Ed.), 2012, Advances in Energy Research: Distributed Generation systems integrating Renewable Energy Resources, Nova Science Publishers Inc., USA, 978-1-61209-991-0 (hardcover), 978-1-61209-991-2 (ebook). 692 pages, 2012 [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=22516](https://www.novapublishers.com/catalog/product_info.php?products_id=22516) (TC\_1\_2012\_DECIE, TC\_5\_2012\_DECIE)

3. Nicu Bizon, M. Oproescu, F. Fattahi, N.M. Tabatabaei, H.S. Abbasi, *Modelling of Energy Generation Systems – A Brief Overview of used models*, Nicu Bizon, M. Oproescu, F. Fattahi, N.M. Tabatabaei, H.S. Abbasi, Chapter 12. Modelling of Energy Generation Systems – A Brief Overview of used models, pp. 483-514 In N. Bizon (Ed.), 2012, Advances in Energy Research: Distributed Generation systems integrating Renewable Energy Resources, Nova Science Publishers Inc., USA, 978-1-61209-991-0 (hardcover), 978-1-61209-991-2 (ebook). 692 pages, , 2012 [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=22516](https://www.novapublishers.com/catalog/product_info.php?products_id=22516) (TC\_1\_2012\_DECIE, TC\_5\_2012\_DECIE)

4. Nicu Bizon, *Control of the Fuel Cell Inverter System*, Nicu Bizon, Chapter 11. Control of the Fuel Cell Inverter System, pp. 447-481 In N. Bizon (Ed.), 2012, Advances in Energy Research: Distributed Generation systems integrating Renewable Energy Resources, Nova Science Publishers Inc., USA, 978-1-61209-991-0 (hardcover), 978-1-61209-991-2 (ebook). 692 pages, 2012, [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=22516](https://www.novapublishers.com/catalog/product_info.php?products_id=22516) (TC\_1\_2012\_DECIE, TC\_5\_2012\_DECIE)

5. Nicu Bizon, Mihai Oproescu, *Chapter 9. Techniques to Mitigate the Fuel Cell Current Ripple*, In N. Bizon (Ed.), 2012, Advances in Energy Research: Distributed Generation systems integrating Renewable Energy Resources, Nova Science Publishers Inc., USA, 978-1-61209-991-0 (hardcover), 978-1-61209-991-2 (ebook). 692 pages, 2012, (TC\_1\_2012\_DECIE, TC\_5\_2012\_DECIE)

6. 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/IJOI, ISSN: 1947-9344, EISSN: 1947-9352, 2012, 2012, (TC\_9\_2012\_DECIE)

7. Nicu Bizon, M. Oproescu, F. Fattahi, N. M. Tabatabaei, H. S. Abbasi, *Chapter 12. Modelling of Energy Generation Systems &dash; A Brief Overview of used models*, In N. Bizon (Ed.), 2012, *Advances in Energy Research: Distributed Generation systems integrating Renewable Energy Resources*, Nova Science Publishers Inc., USA, 978-1-61209-991-0 (hardcover), 978-1-61209-991-2 (ebook). 692 pages, 2012, (TC\_5\_2012\_DECIE, TC\_9\_2012\_DECIE)

8. Alexandru SERBANESCU, Florin-Marian BIRLEANU, *New approaches in nonlinear dynamics analysis of complex systems and processes*, chapter in Nicu BIZON (editor): "Advances in Energy Research: Distributed Generations Systems Integrating Renewable Energy Resources", Series: Energy Science, Engineering and Technology; ISBN: 978-1-61209-991-0, NOVA Publishers, Hauppauge, NY, USA, 2012, (TC\_5\_2012\_DECIE)

## **I.2. Cărți și capitole în cărți de specialitate naționale ca autor (cu ISBN intern)**

1. Ion PREDĂ, GH. CIOLAN, Eugen DIACONESCU, Dumitru CRISTEA, *Transmisii mecanice cu fricțiune pentru autovehicule*, Ed. Univ. din Pitești, ISBN 978-606-560-305-9, 339pag, 2012, (TC\_11\_2012\_DECIE)

2. Enache Bogdan, Eugen Diaconescu, *Achiziții de Date și Instrumentație- Aplicații în LabVIEW*, Ed. Univ. Din Pitesti, ISBN 978-606-560-304-2, 60pag, 2012, (TC\_11\_2012\_DECIE)

3. Eugen DIACONESCU, *Limbajul Erlang. Programarea sistemelor concurente și distribuite*, Editura Albastra, ISBN 978-973-650-295-8, 2012, 128pag, 2012, (TC\_12\_2012\_DECIE)

4. Alexandru Magdalena, *Sisteme de măsurare cu traductoare*, ISBN 978-973-755-844-2, Editura Matrix Rom Bucuresti, 2012, pp.175, 2012, (TC\_12\_2012\_DECIE)

5. Teodorescu Rodica-Mihaela, Lita Ioan, Cioc Bogdan Ion, Visan Daniel Alexandru, Radu Dragos-Gheorghe, *Tehnici pentru generarea și vizualizarea virtuală a semnalelor*, 141pg., Ed. Universitatii din Pitesti, Pitesti 2012, 2012, (TC\_6\_2012\_DECIE)

6. Anghelescu Petre, *AUTOMATE CELULARE – fundamente și abordări practice cu aplicații în criptare*, Editura MATRIX ROM, 237 pag., ISBN 978-973-755-821-3, București, 2012., 2012, (TC\_8\_2012\_DECIE, TC\_7\_2012\_DECIE)

## **I.3. Îndrumare de laborator, culegere de probleme**

1. Enache Bogdan, Eugen Diaconescu, *Interfete și achiziții de date &dash; Aplicații în LabVIEW*, Editura Universitatii din Pitesti, ISBN 978-606-560-304-2, 2012

2. Alexandru Magdalena, *Măsurări electrice și electronice*, ISBN 978-973-755-850-3, Editura Matrix Rom Bucuresti, 2012, pp. 130, 2012

## II. Lucrări (articole) ISI / BDI publicate în anul 2012

### II.1. Articole în reviste cotate ISI Thomson Reuters

1. N. Bizon, *Energy Efficiency of Multiport Power Converters used in Plug-In/V2G Fuel Cell Vehicles*, Applied Energy 96 (2012), 431-443. Impact Factor: 4.781 <http://dx.doi.org/10.1016/j.apenergy.2012.02.075> WOS:000305595500044, 2012, (TC\_5\_2012\_DECIE, TC\_2\_2012\_DECIE)
2. 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)

### II.2. Articole în volume indexate ISI Proceedings

1. Valeriu IONESCU , Ion SIMA ,Adrian Viorel DIACONU, Valentin STAN, *Security Communications Interoperability Protocol Implementation*, 9th International Conference on Communications COMM 2012, , București, România, ISBN 978-1-4673-2573-8, 21÷23 June, 2012, pp. 327÷331. (IEEEExplore – D.O.I:10.1109/ICComm.2012.6262534, INSPEC A.N.:12932552, ISI Proc.: 74753), 2012, (TC\_10\_2012\_DECIE)
2. Mariana Iorgulescu, Robert Cristian Beloiu, *Study of DC Motor Diagnosis Based on the Vibration Spectrum and Current Analysis*, Applied and Theoretical Electricity (ICATE), 2012 International Conference on Date of Conference: 25-27 Oct. 2012 Author(s): Page(s): 1 - 4 Product Type: Conference Publications Conference Location : Craiova, Romania Print ISBN: 978-1-4673-1809-9 Digital Obj [http://apps.webofknowledge.com/ux41l8xu6v.useaccesscontrol.com/full\\_record.do?product=WOS&search\\_mode=Analyze&qid=5&SID=1BEPfbVQXz4IrRliZOj&page=1&doc=3&cacheurlFromRightClick=no](http://apps.webofknowledge.com/ux41l8xu6v.useaccesscontrol.com/full_record.do?product=WOS&search_mode=Analyze&qid=5&SID=1BEPfbVQXz4IrRliZOj&page=1&doc=3&cacheurlFromRightClick=no), 2012, (TC\_11\_2012\_DECIE, TC\_12\_2012\_DECIE)
3. Nicu Bizon, Mihai Oproescu, Milan Stork, *Fuel Cell Hybrid Power Source for Pulsed Current Loads*, INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS, pg. 25-28, Pilsen, CZECH REPUBLIC, ISBN:978-80-261-0038-6 ISSN: 1803-7232 Web of Science Categories: Engineering, Electrical & Electronic; Telecommunications WOS:000329181800004, 2012, (TC\_5\_2012\_DECIE, TC\_11\_2012\_DECIE)
4. N. Bizon, *Fuel Cell Hybrid Power Source that Operates Efficiently under Dynamic Loads*, Int. Conf. on Applied Electronics 2012 - APPEL'12, 21 - 24. Pilsen, CZ, ISSN : 1803-7232, Print ISBN: 978-1-4673-1963-8, INSPEC <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6322864> WOS:000329181800003, 2012, (TC\_1\_2012\_DECIE, TC\_11\_2012\_DECIE)
5. Eugen Diaconescu, Cristian Sparleanu, *Communication solution for industrial control applications with multi-agents using OPC servers*, , Proc. Int. Conference on Applied and Theoretical Electricity ISBN: 978-1-4673-1809-9, DOI: 10.1109/ ICATE.2012.6403431, Papers 6.2, ICATE 2012 – October, 25 – 27, 2012, 11-th International Conference on Applied and Theoretical Electricity-UNIVERSITY OF CRAIOVA, 2012, (TC\_12\_2012\_DECIE)

6. N. Bizon, M. Oproescu, M. Raducu, *On the Dither Persistence in the Extremum Seeking control - Part I: ESC loop based on Band-Pass Filter*, World Congress on Sustainable Technologies (WCST-2012), London, pp 104-108, ISBN: 978-1-4673-4442-5

[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482927&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D6482927](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482927&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D6482927) WOS:000320667000020, 2012, (TC\_2\_2012\_DECIE, TC\_9\_2012\_DECIE)

7. N. Bizon, M. Oproescu, M. Raducu, *On the Dither Persistence in the Extremum Seeking control - Part II: Signal harmonics' persistence for large filtering pass band*, World Congress on Sustainable Technologies (WCST-2012), London, pp 109-114, 2012, ISBN: 978-1-4673-4442-5.[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482928&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D6482928](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482928&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D6482928) WOS:000320667000021 INSPEC Accession Number: 13412239, 2012, (TC\_2\_2012\_DECIE, TC\_9\_2012\_DECIE)

8. G. Şerban, 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)

9. 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, 2012, (TC\_9\_2012\_DECIE)

10. Ionescu, L., Anton, C., Tutănescu, I., Mazăre, A., Şerban, G., *Error correction and detection system based on Hopfield networks*, 2012 International Conference for Internet Technology and Secured Transactions, ICITST 2012, Article number6470868, Pages 541-544, ISBN: 978-190832008-7, 2012, (TC\_9\_2012\_DECIE)

11. Romeo Badea, Corina Savulescu, *Approximation of current-voltage curve from experimental data*, Book Group Author(s): IEEEConference: 11th International Conference on Applied and Theoretical Electricity (ICATE) Location: Craiova, ROMANIA Date: OCT 25-27, 2012 Sponsor(s): Romanian Minist Educ, Res, Youth & Sport Natl Author Res; Univ Craiova, Fac Elect Engn; Inst Elect & Elect Engineers; IEEE Romania Sect; IEEE Romania Sect CS Chapter; IEEE Romania Sect EMB Chapter; IEEE Romania Sect EMC Chapter; IEEE Romania Sect PE Chapter; Oltenia Energy Complex 2012 INTERNATIONAL CONFERENCE ON APPLIED AND THEORETICAL ELECTRICITY (ICATE) Published: 2012, 2012, (TC\_4\_2012\_DECIE, TC\_6\_2012\_DECIE)

12. N. Bizon, M. Oproescu, M. Raducu, *On the Dither Persistence in the Extremum Seeking control - Part II: Signal harmonics' persistence for large filtering pass band*, World Congress on Sustainable Technologies (WCST-2012), London, pp 109-114, ISBN: 978-1-4673-4442-5.[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482928&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D6482928](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6482928&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D6482928) WOS:000320667000021, 2012, (TC\_5\_2012\_DECIE, TC\_9\_2012\_DECIE)

13. Anghelescu Petre, *Hardware Implementation of Programmable Cellular Automata Encryption Algorithm*, 35th International Conference on Telecommunications and Signal Processing, TSP 2012, Praga,

Cehia, ISBN: 978-1-4673-1116-8, IEEE Catalog Number: CFP1288P-CDR, pag. 18 – 21, 3-4 July 2012, 2012, (TC\_8\_2012\_DECIE, TC\_7\_2012\_DECIE)

14. Gabriel Iana, Petre Anghelescu, Gheorghe Serban, *RSA Encryption Algorithm Implemented on FPGA*, 2011 International Conference on Applied Electronics, Book Series: Applied Electronics, Pages: 177 – 180, Published: 2011, Pilsen, CZECH REPUBLIC, ISBN:978-80-7043-987-6, ISSN: 1803-7232 Web of Science Categories: Engineering, Electrical & Electronic WOS:000305136600041, 2012, (TC\_9\_2012\_DECIE)

### **II.3. Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale**

1. Valeriu Manuel Ionescu, Ioan Lita, Daniel Alexandru Visan, Bogdan Cioc, *Optimizing parallel prefix adders for use in digital filters*, University of Pitesti, Scientific Bulletin, Series: Electronics and Computers, Vol 2, Revistă categoria B+, ISSN: 1453-1119, pp. 37-41, 2013, <https://sites.google.com/site/scipioupit/home>,

[http://fecc\\_bulletin.upit.ro/http://journals.indexcopernicus.com/Scientific+Bulletin+Series+Electronics+and+Computer+Science+,p4137,3.html](http://fecc_bulletin.upit.ro/http://journals.indexcopernicus.com/Scientific+Bulletin+Series+Electronics+and+Computer+Science+,p4137,3.html) , ICV 2013: 4.90, ICV 2012: 4.81, 2012, (TC\_3\_2012\_DECIE)

2. Adrian-Viorel DIACONU, Elif Tuba ÇELIK, Ion SIMA, Valeriu IONESCU, Constantin BĂLAN, *HARDWARE IMPLEMENTATION, ON A FPGA, OF GOLAY (23.12.7) ERROR-CORRECTING CODE – FOR USAGE WITHIN WSNs*, University of Pitesti Scientific Bulletin, Series: Electronics and computers science Vol. 1 / 2012, pg. 25-34, ISSN: 1453-1119, Indexare Index Copernicus, 2012, (TC\_10\_2012\_DECIE)

3. Iorgulescu, M., Alexandru, M., Beloiu, R. , *Noise and vibration monitoring for diagnosis of DC motor's faults*, 13 th international Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2012, Brasov ,On page(s): 724 Conference Location : Brasov ISSN : 1842-0133E-ISBN : 978-1-4673-1652-Print ISBN: 978-1-4673-1650-7 INSPEC Accession Number: 12849342 [http://ieeexplore.ieee.org/ux4118xu6v.useaccesscontrol.com/xpl/articleDetails.jsp?tp=&arnumber=6231919&searchWithin%3Dp\\_Authors%3A.QT.Beloiu%2C+R..QT.%26sortType%3Dasc\\_p\\_Publication\\_Year](http://ieeexplore.ieee.org/ux4118xu6v.useaccesscontrol.com/xpl/articleDetails.jsp?tp=&arnumber=6231919&searchWithin%3Dp_Authors%3A.QT.Beloiu%2C+R..QT.%26sortType%3Dasc_p_Publication_Year), 2012, (TC\_11\_2012\_DECIE, TC\_12\_2012\_DECIE)

4. Mariana Iorgulescu, Robert Beloiu, *Noise Monitoring For Fault's Diagnosis of Electrical Machines*, Proceedings of the International Conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE – ECAI-2012 [http://scholar.google.ro/citations?view\\_op=view\\_citation&hl=ro&user=jrrPvH8AAAAJ&sortby=pubdate&imq=Robert+Beloiu&citation\\_for\\_view=jrrPvH8AAAAJ:\\_FxGoFyzp5QC](http://scholar.google.ro/citations?view_op=view_citation&hl=ro&user=jrrPvH8AAAAJ&sortby=pubdate&imq=Robert+Beloiu&citation_for_view=jrrPvH8AAAAJ:_FxGoFyzp5QC), 2012, (TC\_11\_2012\_DECIE, TC\_12\_2012\_DECIE)

5. Emilian Lefter, Diaconescu Eugen, C. Stoica, *Photovoltaic - hydrogen hybrid system - the fuel cell*, 9th World Energy System Conference, June 28-30 2012 Suceava, Romania, WESC 2012, AGIR Bulletin ISSN 1224-7928, CNCSIS B+, 415 code, Nr. 3/2012 iunie-august, 2012, (TC\_11\_2012\_DECIE)

6. Lefter, Em., Constantinescu, L. M., Stoica, C., Cruceru, D., *Laboratory models-solutions for the study of the hybrid electrical systems of traction and supply, with applications in cars*, UNIVERSITY OF PITESTI SCIENTIFIC BULLETIN, Series: Electronics and Computers Science, ISSN 1453-1119, Vol. 12,

Issue 2. Abstract, <https://docs.google.com/file/d/0B-WyYs74In7sdEIPt3Nid0N2RDg/edit>, 2012, (TC\_11\_2012\_DECIE)

7. Stoica, C., Constantinescu, L.M., Lefter, Em., *The current induced calculation in claw pole of an alternator by finite element method*, Buletinul AGIR nr. 3/2012 • iunie-august, ISSN-L 1224-7928, 4 numere pe an, BDI: INDEX COPERNICUS INTERNATIONAL, Online: ISSN 2247-3548, <http://www.agir.ro/buletine/1403.pdf>, pg.327-333, 2012, (TC\_12\_2012\_DECIE)

8. D.Cazacu, C.Castravete, *Efficiency Evaluation via Finite Element Method of 3D Magnetostatic Shields using Different Types of Magnetic Potentials*, IEEE 18th International Symposium for Design and Technology in Electronic Packaging (SIITME 12), IEEE Xplorer pp.25-30, October 25th–28th, Alba Iulia, Romania, 2012 IEEE 18th International Symposium for Design and Technology in Electronic Packaging (SIITME)Year: 2012 Pages: 25 - 30, DOI: 10.1109/SIITME.2012.6384340 IEEE Conference Publications, 2012, (TC\_12\_2012\_DECIE)

9. D.Cazacu, *Factors that influence the magnetostatic shields effectiveness*, Bulletin of Electrical Engineering Faculty, Valahia University of Tirgoviste nr.1/2012,BDI : Copernicus Master List Journal, pp.6-11, ISSN1843-6188<http://www.buletinfie.ro/ro/index.html>,[http://www.buletinfie.ro/ro/numere2012-1/articol\\_03\\_2012\\_Cazacu.pdf](http://www.buletinfie.ro/ro/numere2012-1/articol_03_2012_Cazacu.pdf), 2012, (TC\_12\_2012\_DECIE)

10. Ioan Lita, Daniel Alexandru Visan, *Power Line Communication Module for Distributed Control Systems*, 35th International Spring Seminar on Electronics Technology - ISSE 2012, "Power Electronics", ISSN: 2161-2528, Print ISBN: 978-1-4673-2241-6, pp. 420 - 423, Digital Object Identifier: 10.1109/ISSE.2012.6273173, <http://ieeexplore.ieee.org/>, Department of Applied Electronic Materials (AEM), Institute of Sensor and Actuator Systems, Vienna University of Technology, Bad Aussee, Austria, May 9-13, 2012., 2012, (TC\_2\_2012\_DECIE, TC\_1\_2012\_DECIE)

11. I. Tutănescu, C. Anton, L. Ionescu, G. Șerban, A. Mazăre, *Hybrid Error Detecting and Correcting System using Hardware Associative Memories*, NATO International Conference on Military Communications and Information Systems MCC'2012, 8 - 9 October 2012, Gdansk, Poland, ISBN 978-839201209-2, 2012, (TC\_7\_2012\_DECIE, TC\_9\_2012\_DECIE)

12. Constantin Anton, Laurentiu Mihai Ionescu, Ion Tutanescu, Alin Mazare, Gheorghe Serban, *Implementation and Analysis of an Error Detection and Correction System on FPGA*, International Journal of Intelligent Computing Research (IJICR), Volume 3, Issues 3/4, Sep/Dec 2012, ISSN 2042 4655, 2012, (TC\_9\_2012\_DECIE)

13. C. Anton, L. Ionescu, I. Tutănescu, A. Mazăre, Gh. Șerban, A. Oprea, *Using Associative Memories in Coding Theory for Communication Channels*, World Congress on Internet Security WorldCIS-2012, 10 - 12 June 2012, University of Guelph, Ontario, Canada, published in Conference Proceedings ISBN 978-1-908320-04-9, 2012, 2012, (TC\_9\_2012\_DECIE)

14. Ioan Lita, Daniel Alexandru Visan, *Spherical coordinates control system for accurate orientation of directional antennas*, 2012 IEEE 18th International Symposium for Design and Technology of Electronics Packages - SIITME 2012, pp. 233 - 236, IEEE Catalog Number: CFP1207I-USB, Print ISBN: 978-1-4673-4757-0, Digital Object Identifier: 10.1109/SIITME.2012.6384382, <http://ieeexplore.ieee.org/>, University of Bucharest, Center for Technological Electronics and Interconnection Techniques and "1 decembrie 1918" University of Alba Iulia, Faculty of Science and "Politehnica", Alba Iulia, Romania, 25 - 28, October 2012., 2012, (TC\_3\_2012\_DECIE, TC\_2\_2012\_DECIE)

15. Bogdan-Adrian Enache, Luminita-Mirela Constantinescu, Florin-Marian Birleanu, *State-of-charge estimation of a LiFePO4 battery using an adaptive observer*, University of Pitesti Scientific Bulletin. Series: Electronics and Computers Science, vol. 15, no. 2/2015, pp. 19-24, pISSN: 2344-2158, eISSN: 2344-2166 (BDI: Index Copernicus), 2012, (TC\_2\_2012\_DECIE)
  
16. Rodica-Mihaela Teodorescu, I. Liță, D.A. Vișan, B.I. Cioc, *Virtual instrumentation applied in texts encryption and decryption*, Scientific Bulletin of Electrical Engineering Faculty, „VALAHIA” UNIVERSITY OF TÂRGOVISTE, No.1, ISSN 1843-6188, CNCSIS B+, Index COPERNICUS, pages 12-17, [http://buletinfie.ro/ro/numere2012-1/articol\\_04\\_2012\\_Teodorescu\\_Lita\\_Visan\\_Cioc.pdf](http://buletinfie.ro/ro/numere2012-1/articol_04_2012_Teodorescu_Lita_Visan_Cioc.pdf) , 2012, (TC\_2\_2015\_DECIE, TC\_6\_2015\_DECIE)
  
17. G.A. Iordachescu, X.Q. Wu, J. Jacquet, *Broad-band laser emission and optical mode-locking of a Fabry-Perot laser formed between two Linearly Chirped Fiber Bragg Gratings*, Proceedings of the SPIE 8257, Optical Components and Materials IX, 82570E, San Francisco, nr. volum 8257, pag., nume BDI: ISI Web of Knowledge, SPIE Digital Librarydoi: 10.1117/12.906793, 2012, (TC\_3\_2012\_DECIE)
  
18. G.A. Iordachescu, J. Jacquet, *Design of Bragg gratings having negative group time delay for continuum generation*, Proceedings of the SPIE 8255, Physics and Simulation of Optoelectronic Devices XX, 82550U, San Francisco, nr. volum 8255, pag., nume BDI: ISI Web of Knowledge, SPIE Digital Librarydoi: 10.1117/12.909194, 2012, (TC\_3\_2012\_DECIE)
  
19. Daniel Alexandru Visan, Ioan Lita, *Communication circuit with pulse modulation for transmission of signals from sensors*, 35th International Spring Seminar on Electronics Technology - ISSE 2012, "Power Electronics", ISSN: 2161-2528, Print ISBN: 978-1-4673-2241-6, pp. 416 - 419, Digital Object Identifier: 10.1109/ISSE.2012.6273172, <http://ieeexplore.ieee.org/>, Department of Applied Electronic Materials (AEM), Institute of Sensor and Actuator Systems, Vienna University of Technology, Bad Aussee, Austria, May 9-13, 2012, 2012, (TC\_3\_2012\_DECIE)
  
20. Daniel Alexandru Visan, Ioan Lita, Marian Raducu, *FSK Transmission Circuit for Remote Sensors Integration in Distributed Measurement Systems*, 2012 IEEE 18th International Symposium for Design and Technology of Electronics Packages - SIITME 2012, pp.237-240, IEEE Catalog Number: CFP1207I-USB, Print ISBN: 978-1-4673-4757-0, Digital Object Identifier: 10.1109/SIITME.2012.6384383, <http://ieeexplore.ieee.org/>, University of Bucharest, Center for Technological Electronics and Interconnection Techniques and “1 decembrie 1918” University of Alba Iulia, Faculty of Science and “Politechnica”, Alba Iulia, Romania, 25 – 28, October 2012, 2012, (TC\_3\_2012\_DECIE, TC\_4\_2012\_DECIE)
  
21. Chita, M.A., *Some Aspects Concerning the Experimental Method Study of the Screen Efficiency in the Domain 1-9 GHz*, ICTPE Conference Osfold University College Norway 167-170, Index Copernicus, Journal Master List, graded with an ICV =4,79, 2012, (TC\_4\_2012\_DECIE)
  
22. Corina SAVULESCU, Romeo BADEA, *Monitoring system with WEB cam, with date storage in an encrypted space*, International Symposium of Electrical Engineering, ISEE 2011, Index CopernicusGoogle Scholar/Academic <http://journals.indexcopernicus.com/passport.php?id=3797><http://www.buletinfie.ro/ro/index.html> nr 2 / 2011, 2012, (TC\_4\_2012\_DECIE)
  
23. Florin-Marian Birleanu; Ion Candel; Cornel Ioana; Cedric Gervaise; Alexandru Serbanescu; Gheorghe Serban, *A vector approach to transient signal processing*, 2012 11th International Conference on

Information Science, Signal Processing and their Applications (ISSPA)Pages: 1141 - 1146, DOI: 10.1109/ISSPA.2012.6310462, IEEEExplore, 2012, (TC\_9\_2012\_DECIE)

24. Chita, M.A., *Electronics System for the Revolution per Minutes Control of Continuous Current Motor through PWM in Function of Temperature*, ICTPE Conference Osfold University College Norway 167-170, Index Copernicus, Journal Master List, graded with an ICV =4,79, 2012, (TC\_4\_2012\_DECIE)

25. Alexandru Ene, Daniel Anghel, *Java neural network application for the estimation of a workplace ranking*, University of Pitesti Scientific Bulletin (Series: Electronics and Computers Science, Pitesti, 2012), Vol. 12, Issue 2, pg. 11-14, (BDI Copernicus), 2012, 2012, (TC\_7\_2012\_DECIE, TC\_6\_2012\_DECIE)

26. Alexandru Ene, *Educational software application for the study of the C programming language*, University of Pitesti Scientific Bulletin (Series: Electronics and Computers Science, Pitesti, 2012), Vol. 12, Issue 1, pg. 41-44, (BDI Copernicus), 2012, 2012, (TC\_6\_2012\_DECIE)

27. I. Tutănescu, C. Anton, L. Ionescu, D. Caragață, *Elliptic Curves Cryptosystems Approaches*, International Conference on Information Society i-Society 2012, 25 - 28 June, 2012, London, U.K., published in Conference Proceedings ISBN 978-1-908320-05-6,2012, 2012, (TC\_6\_2012\_DECIE, TC\_7\_2012\_DECIE)

28. Ion Tutănescu, Constantin Anton, Laurențiu Ionescu, Daniel Caragață, *On Assurance of Information Security using Elliptic Curves Cryptosystems*, Journal of Internet Technology and Secured Transactions (JITST), Volume 1, Issues 1/2, March/June 2012, 2012, (TC\_6\_2012\_DECIE, TC\_7\_2012\_DECIE)

29. Anghelescu Petre, *Security of Telemedical Applications over the Internet using Programmable Cellular Automata*, International Journal of Intelligent Computing Research, IJICR, Volume 3, Issue 1/2, ISSN: 2042-4655, pag. 245-251, 2012, 2012, (TC\_8\_2012\_DECIE, TC\_7\_2012\_DECIE)

30. Anghelescu Petre, *Encryption of Multimedia Medical Content using Programmable Cellular Automata*, World Congress on Internet Security, WorldCIS-2012, Ontario, Canada, Print ISBN: 978-1-4673-1108-3, IEEE INSPEC Accession Number: 12948857, pag. 11-16, 10-12 June 2012, 2012, (TC\_8\_2012\_DECIE, TC\_7\_2012\_DECIE)

31. Daniel Anghel, Alexandru Ene, *Ergonomic workstation characterization using neural networks*, University of Pitesti Scientific Bulletin, Automotive series, Year XVIII, No. 22, Volume B, pg. 5-12, (BDI Copernicus), 2012, 2012, (TC\_7\_2012\_DECIE)

32. Anghelescu Petre, *Parallel Algorithms for Matrix Multiplication*, 2nd International Conference on Future Computers in Education, ICFCE 2012, Lecture Notes in Information Technology, Vols. 23-24, Shanghai, China, ISBN: 978-1-61275-014-9, ISSN: 2070-1918, pag. 65-71, 1-2 June 2012, 2012, (TC\_8\_2012\_DECIE)

33. G. Iana, P. Anghelescu, G. Serban, I. Rincu, *SHA-1 cryptographic algorithm implemented on FPGA*, Scientific Bulletin, Series "Electronics and Computers Science", vol. 1/2012, pp.7-13, ISSN 1453-1119, 2012, (TC\_9\_2012\_DECIE)



### **III. Lucrări (articole) publicate în anul 2012 în reviste și volume de conferințe cu referenți (neindexate)**

#### **III.1. Articole în reviste**

1. Eugen DIACONESCU, *Controlul sistemelor distribuite industriale utilizând standardul IEC 61499*, AUTOMATIZĂRI ȘI INSTRUMENTAȚIE, ISSN 1582-2334, Nr. 2/2012, pag. 20-22, 2012, (TC\_12\_2012\_DECIE)
2. Eugen DIACONESCU, *Dezvoltări ale standardelor de interoperabilitate OPC în automatizările industriale-partea I*, AUTOMATIZĂRI ȘI INSTRUMENTAȚIE, ISSN 1582-2334, Nr. 3-4/2012, pag. 15-16, 2012, (TC\_12\_2012\_DECIE)

#### **III.2. Articole în volumele manifestărilor științifice**

1. Teodorescu Rodica-Mihaela, *Instrument virtual pentru criptarea și decriptarea unui text*, Simpozionul Internațional “Universul Științelor”- Ediția a III-a, ISSN 2285-8407, Editura PIM, <https://scholar.google.ro/citations?user=f8mcCn0AAAAJ&hl=ro>, 2012, (TC\_2\_2012\_DECIE, TC\_6\_2012\_DECIE)
2. Teodorescu Rodica-Mihaela, Liță Ioan, Radu Dragoș-Gheorghe, *Osciloscopul virtual*, Simpozionul Internațional “Universul Științelor”- Ediția a III-a, ISSN 2285-8407, Editura PIM, <https://scholar.google.ro/citations?user=f8mcCn0AAAAJ&hl=ro>, 2012, (TC\_4\_2012\_DECIE)

### **IV. Granturi / proiecte de cercetare în anul 2012**

#### **IV.1. Granturi / proiecte câștigate prin competiție internațională**

1. *Advanced Protection of critical buildings by Overall anticipating System -ARGOS*, , Call identifier: FP7-SEC-2012-1, Work programme topics addressed: Topic SEC-2012.2.3-1 Early warning security systems: physical protection of critical buildings, 2012, 0.00, (TC\_9\_2012\_DECIE)

#### **IV.2. Granturi / proiecte câștigate prin competiție națională**

1. Anghelescu Petre, *Criptosistem bazat pe dinamica haotica implementat cu automate celulare pentru protectia informatiei in retelele de comunicatii*, UEFISCDI, PNCDI II: Program resurse umane; Proiecte de cercetare postdoctorala - tip PD, Contract nr. 10/02.08.2010, Suma 246000 lei din care in 2010: 45250 lei, in 2011: 134500 lei, in 2012: 66250 lei (director)., 2012, (TC\_13\_2012\_DECIE)

**UNIVERSITATEA din Pitești**

**Facultatea de Electronica, Comunicatii si Calculatoare**

**Departamentul de Electronica, Calculatoare si Inginerie Electrica**

**Sinteza rezultatelor activităților de cercetare în anul 2012 la nivel de departament**

Categoria / subcategoria activității de cercetare științifică	2012	Total
I. Cărți și capitole în cărți		
I.1 de specialitate, internaționale (autor)	8	8
I.2 de specialitate, naționale (autor)	6	6
I.3 Îndrumare de laborator, culegere de pb.	2	2
II. Lucrări (articole) ISI / BDI		
II.1 în reviste cotate ISI	2	2
II.2 în volume indexate ISI Proceedings	14	14
II.3 în reviste /volumele unor manifestări științifice indexate BDI	33	33
III. Lucrări (articole) neindexate		
III.1 în reviste	2	2
III.2 în volumele manifestărilor științifice	2	2
IV. Granturi / proiecte de cercetare		
IV.1 câștigate prin competiție internațională	1	1
IV.2 câștigate prin competiție națională	1	1

**Data: 30.03.2017**