

LISTA DE LUCRĂRI
a cadrului didactic BIRLEANU FLORIN MARIAN

A. Teza de doctorat

Modelarea semnalelor din procese nestationare si aplicatii bazate pe reprezentarea si analiza in spatiul starilor, Universitatea din Pitești, domeniul Inginerie Electronica si Telecomunicatii, Calculatoare, tehnologia informației, 2011

B. Cărți și capitole în cărți publicate în perioada 2008 - 2022

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

1. 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, TC_5_2012_DECIE)

2. Florin-Marian BIRLEANU, *Recurrence-Based Signal Processing: Applications in Ultrasonic Measurements*, 168 pages, ISBN: 978-3659337031, LAP LAMBERT Academic Publishing AG & Co. KG, Germany, 2013, (TC_5_2013_DECIE, TC_5_2013_DECIE)

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

1. Alexandru SERBANESCU, Octavian STANASILA, Florin-Marian BIRLEANU, *Analiza neliniara a seriilor de timp: aplicatii in prelucrarea semnalelor*, Editura Academiei Tehnice Militare, București, Romania, ISBN: 978-973-640-206-7, 2011

2. Florin-Marian Birleanu, *Limbaje formale, automate si compilatoare. Teorie si aplicatii*, 210 pagini, ISBN 978-606-560-480-3, Editura Universitatii din Pitesti, 2016, (TC_6_2016_DECIE, TC_6_2016_DECIE)

B5. Manuale didactice, suport de curs

1. Florin-Marian BIRLEANU, *Abecedar de programare: De la zero barat la bun de programat*, ISBN: 978-973-0-26328-2 (Editie online/PDF, 2018), Pitesti, 360 pagini in format A5, 2018

C. Lucrări (articole) ISI / BDI publicate în perioada 2008 - 2022

C2. Articole în volume indexate ISI Proceedings

1. Florin-Marian BIRLEANU, Cornel IOANA, Alexandru SERBANESCU, Gheorghe SERBAN, Emil SOFRON, *Estimation of thermo-hydrodynamic parameters in energy production systems using non-stationary signal processing*, in Proceedings of the "Fourty-Fourth Asilomar Conference on Signals, Systems and Computers", pp. 1353-1356, ISBN: 978-1-4244-9720-1 ISSN: 1058-6393, Monterey, CA, USA, 2010

2. Florin-Marian BIRLEANU, Cornel IOANA, Alexandru SERBANESCU, Jocelyn CHANUSSOT, *A time-distributed phase space histogram for detecting transient signals*, in Proceedings of the "IEEE International Conference on Acoustics, Speech and Signal Processing", (ICASSP 2011, May 22-27, Prague, Czech Republic), pp. 3844-3847, ISBN: 978-1-4577-0537-3, 2011

3. Florin-Marian BIRLEANU, Cornel IOANA, Cedric GERVAISE, Jocelyn CHANUSSOT, Alexandru SERBANESCU, Gheorghe SERBAN, *On the Recurrence Plot Analysis method behaviour under scaling transform*, in Proceedings of the "2011 IEEE Statistical Signal Processing Workshop", (SSP 2011, June 28-30, Nice, France), pp. 793-796, ISBN: 978-1-4577-0568-7, 2011

4. Alexandru SERBANESCU, Florin-Marian BIRLEANU, Angela DIGULESCU, *Overview of our recent results in signal analysis using recurrence plots*, in Proceedings of the International Conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE ECAI-2013, June 27 - June 29, vol. 5, no. 4/2013, pp. 7-12, ISSN - 1843-2115, 2013, (TC_5_2013_DECIE, TC_5_2013_DECIE)

5. Cornel Ioana, Angela Digulescu, Alexandru Serbanescu, Ion Candel, Florin-Marian Birleanu, *Recent Advances in Non-stationary Signal Processing Based on the Concept of Recurrence Plot Analysis*, chapter in "Translational Recurrences. From Mathematical Theory to Real-World Applications" (Editors: Norbert Marwan, Michael Riley, Alessandro Giuliani, Charles L. Webber, Jr.), ISBN: 978-3-319-09530-1 (Print) 978-3-319-09531-8 (Online), series "Springer Proceedings in Mathematics & Statistics", vol. 103, pp. 75-93, 2014, (TC_5_2014_DECIE, TC_5_2014_DECIE)
6. Florin-Marian Birleanu, Bogdan-Adrian Enache, Magdalena Alexandru, *First Steps Towards Designing a Compact Language for the Description of Logic Circuits*, Proceedings of "2016 International Conference on COMMUNICATIONS (COMM 2016)", June 9-11, Bucharest, Romania, pp. 357-360, ISBN 978-1-4673-8196-3, 2016, (TC_6_2016_DECIE, TC_6_2016_DECIE)
7. Bogdan-Adrian Enache, Florin-Marian Birleanu, Marin Radut, *Modeling a PV panel using the manufacturer data and a hybrid adaptive method*, Proceedings of "The 8th INTERNATIONAL CONFERENCE on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE (ECAI 2016)", June 30 - July 2, Ploiesti, Romania, vol. 8, no. 2 (BDI: IEEE Xplore), 2016, (TC_2_2016_DECIE, TC_2_2016_DECIE)
8. Oproescu Mihai, Nicu Bizon, Gabriel Iana, Florin Birleanu, Ioan Lita, *Optimize of the long-term supply for a detection, vibration monitoring and recognition of the critical infrastructure protection system*, in Proceedings of the "2017 International Conference on Applied Electronics (AE)", 5-6 Sept. 2017, Pilsen, Czech Republic, pp. 1-6, DOI: 10.23919/AE.2017.8053603 (BDI: IEEE Xplore), 2017, (TC_8_2017_DECIE)
9. Florin-Marian Birleanu, Vasile-Gabriel Iana. Mihai Oproescu, Silviu Ionita, *Feature extraction for distance-based classification of signal sources*, in Proceedings of the "9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 2017", 29 June - 1 July 2017, Targoviste, Romania, pp. 1-4, DOI: 10.1109/ECAI.2017.8166433 (BDI: IEEE Xplore), 2017, (TC_8_2017_DECIE)

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

1. Florin-Marian BIRLEANU, Ion CANDEL, Cornel IOANA, Cedric GERVAISE, Alexandru SERBANESCU, Gheorghe SERBAN, *A vector approach to transient signal processing*, in Proceedings of "The 11th International Conference on Information Science, Signal Processing and their Applications", (July 2-5, Montreal, Quebec, Canada), pp. 1174-1179 (BDI: Scopus), 2012, (TC_4_2012_DECIE, TC_4_2012_DECIE)

D. Lucrări (articole) publicate în perioada 2008 - 2022 în reviste și volume de conferințe cu referenți (neindexate)

D1. Articole în reviste

1. Florin-Marian BIRLEANU, Emil SOFRON, *Analysis of recurrence plot vs autocorrelation based frequency estimation methods*, in "University of Pitesti Scientific Bulletin. Series: Electronics and computers science", no. 9, vol. 2/2009, pp. 17-22, ISSN - 1453-1119, Edited by University of Pitesti (BDI: Index Copernicus), 2009
2. Florin-Marian BIRLEANU, Emil SOFRON, *Improving recurrence-based fundamental frequency estimation by using image processing*, in "University of Pitesti Scientific Bulletin. Series: Electronics and computers science", no. 10, vol. 2/2010, pp. 13-16, ISSN - 1453-1119, Edited by University of Pitesti (BDI: Index Copernicus), 2010
3. 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, TC_2_2012_DECIE)
4. Florin-Marian Birleanu, *A Method for Translating Pseudocode to HDL via Finite Automata*, University of Pitesti Scientific Bulletin, Series: Electronics and Computers Science, vol. 14, no. 1, pp. 11-18, pISSN: 2344-2158, eISSN: 2344-2166 (BDI: Index Copernicus), 2014, (TC_6_2014_DECIE, TC_6_2014_DECIE)
5. Florin-Marian Birleanu, Cosmin-Ionut Maciuca, Bogdan-Adrian Enache, *A Didactic Implementation of a Minimalist Compiler*, Journal of Electrical Engineering, Electronics, Control and Computer Science, vol. 1, no. 1, September 2015, pp. 27-32, ISSN: 2457-7812, ISSN-L: 2457-7812 (BDI:

Google Scholar), 2015, (TC_6_2015_DECIE, TC_6_2015_DECIE)

6. Georgiana-Mihaela Nitu, Florin-Marian Birleanu, *FASharpSim: A Software Simulator for Deterministic and Nondeterministic Finite Automata*, Journal of Electrical Engineering, Electronics, Control and Computer Science, vol. 2, no. 2, June 2016, pp. 13-20, ISSN: 2457-7812, ISSN-L: 2457-7812 (BDI: Google Scholar), 2016, (TC_6_2016_DECIE, TC_6_2016_DECIE)

7. Mihai-Ionut Vilcu, Florin-Marian Birleanu, *Design and implementation of a translator for converting a minimalist language to VHDL*, University of Pitesti Scientific Bulletin. Series: Electronics and Computers Science, vol. 16, no. 2/2016, pp. 18-25, pISSN: 2344-2158, eISSN: 2344-2166 (BDI: Index Copernicus), 2016, (TC_6_2016_DECIE, TC_6_2016_DECIE)

8. 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)

9. Florin-Marian BIRLEANU, *CHDLI: 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)

10. Florin Georgian MARIN, Florin-Marian BIRLEANU, *Implementation of a custom language for digital image processing*, University of Pitesti Scientific Bulletin. Series: Electronics and Computers Science, vol. 19, no. 1/2019, pp. 15-18, 2019, (TC_12_2019_DECIE)

11. Florin-Marian BIRLEANU, *Interpreting a basic turtle graphics programming language: hand-coded vs JavaCC based implementations*, Journal of Electrical Engineering, Electronics, Control and Computer Science (JEECCS), Issue 18, Vol. 5, No. 4/2019 (December 2019), pp. 1-6., 2019, (TC_12_2019_DECIE)

D2. Articole în volumele manifestărilor științifice

1. Florin-Marian BIRLEANU, Gheorghe SERBAN, Emil SOFRON, *An area-efficient FPGA-based implementation of RSA*, in "Proceedings of the International Conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE - ECAI'09", (July 3-5, Pitesti, Romania), vol. 2/2009 ("Electronic Circuits & Equipments"), pp. 146-151, ISSN - 1843-2115, Edited by University of Pitesti, 2009

2. Florin-Marian BIRLEANU, Emil SOFRON, Gheorghe SERBAN, *Using image processing techniques for noise reduction in recurrence plots*, in "Proceedings of the International Conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE - ECAI'09", (July 3-5, Pitesti, Romania), vol. 4/2009 ("Software & AI"), pp. 77-82, ISSN - 1843-2115, Edited by University of Pitesti, 2009

3. Florin-Marian BIRLEANU, Alexandru SERBANESCU, *Recurrence plot analysis - Emerging tool for non-stationary signal processing*, presentation in 3rd edition of "Advanced Works on Transient Signal Characterization" workshop during the "8th International Conference on Communications 'COMM2010", (June 10-12, Bucharest, Romania), 2010

4. Florin-Marian BIRLEANU, Cornel IOANA, Cedric GERVAISE, Yvan SIMARD, *Recurrence plot analysis (RPA): a new tool for click detection and clustering clicks into trains*, in Fifth International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals using Passive Acoustics, (August 21-25, Timberline Lodge, Mount Hood, Oregon, USA), 2011

5. Ion CANDEL, Florin-Marian BIRLEANU, Cornel IOANA, Gheorghe SERBAN, Emil SOFRON, *Partial discharge detection in high voltage cables using advanced signal processing techniques*, in Proceedings of IC ECAI 2011, (30 June - 2 July, Pitesti, Romania), vol. 4, no. 6/2011, pp. 23-28, ISSN: 1843-2115, 2011

6. Adrian LUCA, Florin-Marian BIRLEANU, Guy D'URSO, Sylvain BLAIRON, Emil SOFRON, *Structure strain monitoring using distributed fiber optic sensors*, in Proceedings of IC ECAI 2011, (30 June - 2 July, Pitesti, Romania), vol. 4, no. 6/2011, pp. 29-34, ISSN: 1843-2115, 2011

7. Florin-Marian BIRLEANU, Cornel IOANA, Cédric GERVAISE, Alexandru SERBANESCU, Jocelyn CHANUSSOT, *Caracterisation des signaux transitoires par l'analyse des recurrences de phase*, in 23eme Colloque GRETSI, (September 5-8, Bordeaux, France), 2011

8. Cornel Ioana, Alexandru Serbanescu, Angela Digulescu, Florin-Marian Birleanu, Ion Candel, *Recent advances in non-stationary signal processing using recurrence plots*, presentation in Fifth International Symposium on Recurrence Plots, August 14-16, Chicago, USA, 2013, (TC_4_2013_DECIE, TC_4_2013_DECIE)

F. Granturi / proiecte de cercetare în perioada 2008 - 2022

F1. Granturi / proiecte câștigate prin competiție internațională

1. *Cost-Efficient Data Collection for Smart Grid and Revenue Assurance*, Florin-Marian BIRLEANU (membru), Laurentiu IONESCU (director), ERA-NET Smart Grids Plus - H2020, CERA-SG (77594), 01/04/2016 - 31/03/2019 (valoare UPIT=461835 lei), 2016, 0.00, (TC_2_2016_DECIE, TC_2_2016_DECIE)

2. *ERASMUS + IESRES (Innovative European Studies on Renewable Energy Systems)*, Florin-Marian BIRLEANU (membru), Robert Cristian BELOIU (director), Erasmus+ EU Project No: 2015-1-TR01-KA203-021342, "INNOVATIVE EUROPEAN STUDIES ON RENEWABLE ENERGY SYSTEMS (IESRES)", Starting Date: 01 September 2015, Duration: 3 years, Responsibles: Erol Kurt, Robert Cristian Beloiu (UPIT), Activities: June 26 - July 2, 2016, Pitesti, Romania; October 16-22, 2016, Perugia, Italy., 2016, 0.00, (TC_11_2016_DECIE, TC_11_2016_DECIE)

F2. Granturi / proiecte câștigate prin competiție națională

1. Florin-Marian BIRLEANU (membru), Gabriel IANA (director), *System for acquisition, monitoring, analysis and recognition of vibrations for critical infrastructure protection*, PN-III-P2-2.1-PTE-2016-0215, SmartVibes, 2016-2018, 2016, (TC_4_2016_DECIE, TC_4_2016_DECIE)

1. Florin-Marian BIRLEANU (membru), Petre ANGHELESCU (director), *Criptosistem simetric modular pentru securizarea traficului în rețelele de telecomunicații*, PN-III-P2-2.1-PED-2021-3669, CRYPTONET, 2022-2025

F3. Contracte de cercetare cu mediul socio-economic

1. Florin-Marian BIRLEANU (membru), Cornel IOANA (director), *Modelisation de la propagation des ultrasons dans un écoulement turbulent*, Beneficiar: Electricite de France (Franta), Contrat EDF 8610-BXE-4300173932, 2009-2010, 2009

2. Florin-Marian BIRLEANU (director), *Recognition and classification of surfaces and structures. Evaluation and creation of specific algorithms in order to be integrated into industrial image processing systems*, Beneficiar: S.C. DPR Draexlmaier Procese de Productie Romania S.R.L. (Romania), Contract: 5/21.01.2014 (DPR); 4/24.01.2014 (UPIT) / Durata: februarie 2014 - decembrie 2014 (valoare UPIT=20744 euro), 2014, (TC_13_2014_DECIE, TC_13_2014_DECIE)

Data: 19.09.2022

**Cadrul didactic BIRLEANU FLORIN MARIAN
Semnătura**