

Lista de lucrări

a. Lista celor maxim 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii, care sunt incluse în format electronic în dosar:

- **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, July 3-5, 2009, Pitesti, Romania), vol. 2/2009 ("Electronic Circuits & Equipments"), pp. 146-151, ISSN: 1843-2115.

- **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" (November 7-10, 2010, Monterey, CA, USA), pp. 1353-1356, IEEE Catalog Number: CFP10431-CDR, ISBN: 978-1-4244-9720-1, ISSN: 1058-6393.

- **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, May 22-27, 2011, Prague, Czech Republic), pp. 3844-3847, IEEE Catalog Number: CFP11ICA-USB, ISBN: 978-1-4577-0537-3.

- **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, June 28-30, 2011, Nice, France), pp. 793-796, IEEE catalog number: CFP11SAP-CDR, ISBN: 978-1-4577-0568-7.

- **Florin-Marian BIRLEANU**, Cornel IOANA, Cedric GERVAISE, Alexandru SERBANESCU, Jocelyn CHANUSSOT: "Caractérisation des signaux transitoires par l'analyse des récurrences de phase," in 23ème Colloque GRETSI (September 5-8, 2011, Bordeaux, France).

- **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" (ISSPA, July 2-5, 2012, Montreal, Quebec, Canada), pp. 1141-1146.

- 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, Springer, 2014.

- **Florin-Marian BÎRLEANU**: "A Method for Translating Pseudocode to HDL via Finite Automata", in "University of Pitesti Scientific Bulletin, Series: Electronics and Computers Science", vol. 14, no.1, pp. 11-18, pISSN: 2344 – 2158, eISSN: 2344 – 2166, 2014.

b. Teza sau tezele de doctorat:

- "Modelarea semnalelor din procese nestăționare și aplicații bazate pe reprezentarea și analiza în spațiul stărilor," Teza de doctorat in domeniul "Inginerie electronica si telecomunicatii", Universitatea din Pitești, Romania, 2011.

- "Construction des espaces de representation RPA pour l'analyse des signaux transitoires", These de doctorat dans le domaine "Signal, Image, Parole, Telecoms", Universite de Grenoble, France, 2012.

c. *Brevetele de invenții și alte titluri de proprietate industrială:* -

d. *Cărți și capitole din cărți:*

- Alexandru SERBANESCU, **Florin-Marian BIRLEANU**: chapter 3 - "New approaches in nonlinear dynamics analysis of complex systems and processes," pp. 67-94, in Nicu BIZON (editor): "Complex Behaviour of the Distributed Generation System. Intelligent Management of the Renewable Energy Resources for assuring the DG System Power Quality and a Sustainable Development," ISBN: 978-606-560-128-4, Publishing House of University of Pitesti, Pitesti, Romania, 2010.

- Alexandru SERBANESCU, Octavian STANASILA, **Florin-Marian BIRLEANU**: "Analiza neliniară a seriilor de timp: aplicații în prelucrarea semnalelor," ISBN: 978-973-640-206-7, Editura Academiei Tehnice Militare, Bucuresti, Romania, 2011.

- Alexandru SERBANESCU, **Florin-Marian BIRLEANU**: chapter 3 - "New approaches in nonlinear dynamics analysis of complex systems and processes," 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.

- **Florin-Marian BIRLEANU**: "Recurrence-Based Signal Processing: Applications in Ultrasonic Measurements," ISBN: 978-3659337031, 168 pages, LAP LAMBERT Academic Publishing AG & Co. KG, Germany (February 17, 2013).

- 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, Springer, 2014.

e. *Articole/studii în extenso, publicate în reviste din fluxul științific internațional principal:* -

f. *Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate:*

- **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 "Forty-Fourth Asilomar Conference on Signals, Systems and Computers" (November 7-10, 2010, Monterey, CA, USA), pp. 1353-1356, IEEE Catalog Number: CFP10431-CDR, ISBN: 978-1-4244-9720-1, ISSN: 1058-6393.

- **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, May 22-27, 2011, Prague, Czech Republic), pp. 3844-3847, IEEE Catalog Number: CFP11ICA-USB, ISBN: 978-1-4577-0537-3.

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- 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, 2013), vol. 5, no. 4/2013, pp. 7-12, ISSN - 1843 - 2115.

g. Alte lucrări și contribuții științifice sau, după caz, din domeniul creației artistice:

Articole și prezentări:

- **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, 2009, Pitesti, Romania), vol. 2/2009 ("Electronic Circuits & Equipments"), pp. 146-151, ISSN - 1843 – 2115.

- **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, July 3-5, 2009, Pitesti, Romania), vol. 4/2009 ("Software & AI"), pp. 77-82, ISSN: 1843-2115.

- **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.

- **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.

- **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”" (COMM, June 10-12, 2010, Bucharest, Romania).

- 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 the " International Conference on Electronics, Computers and Artificial Intelligence" (ECAI, 30 June - 2 July, 2011, Pitesti, Romania), vol. 4, no. 6/2011, pp. 23-28, ISSN: 1843-2115.

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

- **Florin-Marian BIRLEANU**, Cornel IOANA, Cedric GERVAISE, Alexandru SERBANESCU, Jocelyn CHANUSSOT: "Caractérisation des signaux transitoires par l'analyse des récurrences de phase," in 23ème Colloque GRETSI (September 5-8, 2011, Bordeaux, France).

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

- 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, 2013, Chicago, USA.

- **Florin-Marian BIRLEANU**: "A Method for Translating Pseudocode to HDL via Finite Automata", in "University of Pitesti Scientific Bulletin, Series: Electronics and Computers Science", vol. 14, no.1, pp. 11-18, pISSN: 2344 – 2158, eISSN: 2344 – 2166, 2014.

Contracte de cercetare:

- Cornel IOANA (director), **Florin-Marian BIRLEANU** (membru): "Modelisation de la propagation des ultrasons dans un écoulement turbulent", Rapport de recherche, 14 juin 2010. Contract: 8610-BXE-4300173932. Beneficiar: Electricite de France (Franta). Durata: septembre 2009 – iunie 2010.

- **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", 3 rapoarte de cercetare. Contract: 5/21.01.2014 (DPR); 4/24.01.2014 (UPIT). Beneficiar: S.C. DPR Draexlmaier Procese de Productie Romania S.R.L. (Romania). Valoare: 20744 euro. Durata: februarie 2014 – decembrie 2014.

Data:

Semnătura:
As. dr. ing. **Florin-Marian BÎRLEANU**