

Anexa CV - Belean Ioan Bogdan

Lista de lucrări

A. Books / Carti / Capitole de cărți

Bogdan Belean, Raul Malutan, Monica Borda: *Architectures reconfigurables pour le traitement du signal*. First Edition edited by No. 15, Constantin Daicoviciu str., zip 400020, Cluj-Napoca, tel +40264-202 364, utpress@biblio.utcluj.ro, 10/2013; UTPress., ISBN: 978-973-662-870-2.

R. Malutan, M. Borda, B. Belean: *Traitement du signal génomique*, UT Press, ISBN 978-973-662-608-1, 2011.

Simina Emerich, Eugen Lupu, Bogdan Belean, Septimiu Crisan: *Image Feature Detectors and Descriptors*. Studies in Computational Intelligence, 630 02/2016: chapter Image Analysis and Coding Based on Ordinal Data Representation: pages 281-303; Springer International Publishing., ISBN: 978-3-319-28852-9.

Bogdan Belean: *Application-Specific Hardware Architectures Design with VHDL*, Springer Nature Publishing House, 170 pages, under print - manuscript ID:86402647.

B. Journal Publications

a) Autor principal (Reviste indexate WebOfScience - Thomson Reuters)

1. Mihaela Streza, Bogdan Belean, Ioana Hodisan, Cristina Prejmerean, *Improving lock-in thermography detection of microgaps located at the tooth-filling interface using a phase versus amplitude image signal extraction approach*, Measurement, 104:21-28, 2017
2. Bogdan Belean, Monica Borda, Jörg Ackermann, Ina Koch, Ovidiu Balacescu: *Unsupervised image segmentation for microarray spots with irregular contours and inner holes*. BMC Bioinformatics 12/2015; 16(1):412.
3. Bogdan Bot, Simina Emerich, Sorin Martoiu, Bogdan Belean: *FSL-based Hardware Implementation for Parallel Computation of cDNA Microarray Image Segmentation*. International Journal of Advanced Computer Science and Applications 08/2015; 6(7):20-27.
4. Bogdan Belean, Carmen Belean, Calin Floare, Codruta Varodi, Adrian Bot, Gheorghe Adam: *Computer Research and Modeling*, 2015, vol. 7, no. 3, pp. 399-406
5. Bogdan Belean, Romulus Terebes, Adrian Bot: *Low-complexity PDE-based approach for automatic microarray image processing*. Medical & Biological Engineering & Computing 10/2014; 53(2).
6. Bogdan Belean, Monica Borda, Adrian Bot, Sergiu Nedevschi: *Low Complexity Approach for High Throughput Belief-Propagation based Decoding of LDPC Codes*. Advances in Electrical and Computer Engineering 12/2013; 12(4):69-72.
7. Bogdan Belean, Monica Borda, Bertrand Le Gal, Romulus Terebes: *FPGA based system for automatic cDNA microarray image processing*. Computerized medical imaging and graphics: the official journal of the Computerized Medical Imaging Society 03/2012; 36(5):419-29.
8. Bogdan Belean, Monica Borda, Albert Fazakas: *Adaptive Microarray Image Acquisition System and Microarray Image Processing Using FPGA Technology*. Lecture Notes in Computer Science 09/2008; 5179:327-334.

b) Coautor

9. N. Cobîrzan, A. Balog, B. Belean, G. Borodi, D. Dădârlat, M. Streza: *Thermophysical properties of masonry units: Accurate characterization by means of photothermal techniques and relationship to porosity and mineral composition*. Construction and Building Materials 02/2016; 105:297-306.

b) Indexate BDI:

10. Keresztes, B., Belean, B., Borda, M., Lavialle, O., "Microarray Image Segmentation Using Marked Point Processes", Scientific bulletin of "Politehnica" University, Timisoara, Electronics and Communications, ISSN 1583-3380, pp. 124 - 129, 2010.
11. Bogdan Belean, Monica Borda, Albert Fazakas: *Hardware Strategies For Image Processing In An Fpga Based Microarray Image Processing Soc*. Acta Technica Napocensis, Electronics and Telecommunications, ISSN 1221-6542, 50(2), 1-4, 2009.
12. Belean, B., Borda, M., Malutan, M., Biarge, R., V., "FPGA based digital device and microarray image addressing", Scientific bulletin of "Politehnica" University, Timisoara, Electronics and Communications, ISSN: 1583-3380, 52(66), pp. 15 - 19, 2007.

C. Patents / Brevete de inventie

Bogdan Belean, Monica Borda, Raul Malutan, Romulus Terebes: *Method And Hardware Architecture For Automatic Microarray Image Addressing*. Ref. No: RO127341-A2, Year: 04/2012

D. Conference Proceedings

1. B. Belean; S. Pogacian; A. Bot, *Electric generator driven by paraboloid solar concentrator*, IEEE Xplore Conference - Grid, Cloud & High Performance Computing in Science (ROLCG), 2015, 1 - 4.
2. Bogdan Belean: *Comparison of Formant Detection Methods Used in Speech Processing Applications*. 11/2013; 1565(1):85-89. DOI:10.1063/1.4833702
3. Bogdan Belean, Sergiu Nedevschi, Monica Borda: *Application specific hardware architecture for high-throughput short-length LDPC decoders*. Intelligent Computer Communication and Processing (ICCP), 2013 IEEE International Conference on; 09/2013
4. Bogdan Belean, Monica Borda, Adrian Bot: *FPGA based hardware architectures for iterative algorithms implementations*. 36th International Conference on Telecommunications and Signal Processing, Rome; 07/2013
5. B. Belean, S. Pogacian, A. Bot: *FPGA based hardware architectures for high performance computing applications*. Tier 2 Federation Grid, Cloud & High Performance Computing Science (RO-LCG), 2012 5th Romania; 01/2012
6. Bogdan Belean, Monica Borda, Bertrand LeGal, Raul Malutan: *FPGA technology and parallel computing towards automatic microarray image processing*. 34th International Conference on Telecommunications and Signal Processing (TSP 2011), Budapest, Hungary, Aug. 18-20, 2011; 08/2011
7. Monica Borda, Bogdan Belean, Romulus Terebes, Raul Malutan: *FPGA based SoC for automated cDNA microarray image processing*, E-Health and Bioengineering Conference (EHB), 2011, pp. 1-4.

8. Raul Malutan, Bogdan Belean, Pedro Gomez Vilda, Monica Borda: *Two Way Clustering of Microarray Data Using a Hybrid Approach*. 34th International Conference on Telecommunications and Signal Processing (TSP 2011), Budapest, Hungary, Aug. 18-20, 2011; 08/2011
9. Bogdan Belean, Monica Borda, Albert Fazakas: *Hardware Implementation for Edge Detection in cDNA Microarray Images*. BIODEVICES 2009 - Proceedings of the International Conference on Biomedical Electronics and Devices, Porto, Portugal, January 14-17, 2009; 01/2009
10. Bogdan Belean, Albert Fazakas, Raul Malutan, Monica Borda: *Hardware implementation of microarray image segmentation*. Automation, Quality and Testing, Robotics, 2008. AQTR 2008. IEEE International Conference on; 06/2008
11. V. Rodellar, F. Diaz, B. Belean, R. Malutan, B. Stetter, P. Gomez, R. Martinez, E. Garcia, J. Peldez: *Genomic Microarray Processing on a FPGA for Portable Remote Applications*. Programmable Logic, 2007. SPL '07. 2007 3rd Southern Conference on; 03/2007
12. P. Gomez, F. Diaz, B. Belean, R. Malutan, B. Stetter, R. Martinez, V. Rodellar: *An FPGA-based genetic microarray processing device*. Electronics, Circuits and Systems, 2006. ICECS '06. 13th IEEE International Conference on; 01/2007
13. P. Gomez, F. Diaz, B. Belean, R. Malutan, B. Stetter, R. Martinez, V. Rodellar: *Robust cDNA microarray image processing on a hand-held device*, IEEE International Conference on Reconfigurable Computing and FPGA's, ReConFig 2006, pp. 1-5.