

Assistant Professor Robert-Alexandru Dobre

Competence areas: Digital Signal Processing, Embedded Systems, Multimedia Forensics

Scientific activity: Joint author of 1 laboratory book on C programming of embedded systems; author of **11 conference papers** (4 papers indexed by ISI Web of Science and 7 papers indexed by other international databases). **17 citations** according to Google Scholar and **Hirsch index of 2**. Two excellent paper awards at international conferences. Member in 2 research teams for national projects.

Representative articles associated to the project's theme:

1. **R. A. Dobre**, V. A. Niță, A. Ciobanu, C. Negrescu, D. Stanomir, "Low computational method for siren detection", 2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging (SIITME), DOI: 10.1109/SIITME.2015.7342342, 2015, pp. 291 - 295.
2. **R. A. Dobre**, V. A. Niță, S. Ciochină, C. Paleologu, "New insights on the convergence analysis of the affine projection algorithm for system identification", 2015 International Symposium on Signals, Circuits and Systems (ISSCS), DOI: 10.1109/ISSCS.2015.7203988, 2015, pp. 1 - 4.
3. **R. A. Dobre**, V. A. Niță, A. Ciobanu, C. Negrescu, D. Stanomir, "A hum removal algorithm used for audio restoration purposes", 2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging (SIITME), DOI: 10.1109/ISSCS.2015.7204000, 2015, pp. 1 - 4.
4. V. A. Niță, **R. A. Dobre**, A. Drumea, A. Ciobanu, C. Negrescu, D. Stanomir, "Electrical network signal's waveform and frequency logging for forensic", 2015 9TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), WOS:000368159800027, ISBN:978-1-4799-7514-3, 2015, pp. 156 - 161.
5. A. Drumea, **R. A. Dobre**, "Modelling, simulation and testing of an autonomous embedded system supplied by a photovoltaic panel", 2014 IEEE 20TH INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME), WOS:000358258300056, ISBN:978-1-4799-6962-3, 2014, pp. 309 - 312
6. V. A. Niță, A. Ciobanu, **R. A. Dobre**, C. Negrecu, D. Stanomir, R. O. Preda, "ENF phase discontinuity detection based on multi-harmonics analysis", U.P.B. Sci. Bull., Series C, Vol. 77, Iss. 4, ISSN 2286-3540, 2015, pp.119 - 130.
7. A. Ciobanu, C. Negrescu, V. A. Niță, **R. A. Dobre**, D. Stanomir, "High accuracy frequency analysis using instantaneous frequency attractors", 2015 23rd European Signal Processing Conference (EUSIPCO), DOI: 10.1109/EUSIPCO.2015.7362446, 2015, pp. 564 - 568.

National research grants as project member:

1. *LUTAZ – TACTICAL TARGETING SCOPES FAMILY WITH LARGE ZOOM FACTOR*, Financing contract: Nr. 3DPST / 2013, Submission code: PN-II-IN-DPST-2012-1-0063, 2013-2015
2. *SIOPTEF – AUTOMATIC INTERACTIVE SYSTEM FOR OPTIMISING WATER, NUTRIENTS AND PESTICIDES INPUTS FOR INCREASING THE TECHNICAL AND ECONOMICAL COMPETITIVITY OF SMALL AND MEDIUM SIZED FARMS*, Project code: PN-II-PT-PCCA-2011-3.2-0899, Contract Nr. 121 / 2012, 2012-2014