Concurs pentru ocuparea postului poz. 56, asistent de cercetare științifică – A.C.S.,
Facultatea de Informatică,

L I S T A D E L U C R Ă R I

Candidat: **Damian V. Cătălin**

a) Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante

1. **C. Damian**, L. Alboaie, A. Iftene, *Using WSN and Mobile Apps for Home and Office Ambient Monitoring and Control*, International Conference on Human-Computer Interaction, pp. 42-46, 2501-9422, 8-9 Septembrie, 2016, Iasi, Romania
2. **C. Damian**, E. Lunca, M. Ilinca, *Remote administration of hardware resources using TCP/IP Protocol and WEB technologies*, EPE 2014, October, 16-18, 2014, Iasi, Romania
3. **C. Damian**, M. Ilinca, *Implementation of Software Changes in Programming Techniques Learning*, EPE 2014, October, 16-18, 2014, Iasi, Romania
4. **C. Damian**, D. Petrisor, C. Fosalau, C. Zet, *Landslide Survailance Using A Wirelless Measurement Grid*, în curs de apariţie, în Environmental Engineering and Management Journal, FI - 1,065. Scrisoare de acceptare şi recenzii în dosarul de concurs.
5. **C. Damian**, O. Postolache, J.M. Dias Pereira, C. Fosalau, P.S. Girao, *Sensor Network for Water Quality Assesment*, EPE 2012, pp. 849-852, ISBN: 978-1-4673-1171-7, October, 25-27, 2012, Iasi, Romania
6. **C. Damian,** C. Zet, E. Danila, M*inimizing the fir filter area used in a fpga power computing instrument*, Buletinul AGIR nr. 3/2012, iunie-august, ISSN-L 1224-7928, Online: ISSN 2247-3548, BDI: INDEX COPERNICUS INTERNATIONAL
7. **C. Damian**, C. Fosalau, S*ources of indoor noise and options to minimize adverse human health effects*, Environmental Engineering and Management Journal, March 2011, Vol.10, No.3, pp. 393-400, Print ISSN: 1582-9596
8. **C. Damian**, C. Zet, C. Fosalau, *Hybride networks for remote measurements and control in restricted areas*, Proceedings of the 6th International Conference on Management of Technological Changes MTC2009, SEPTEMBER 3rd – 5th, 2009 ALEXANDROUPOLIS, GREECE, pp 481-484, ISBN 978-960-89832-6-7
9. **C. Damian**, C. Fosalau, C. Zet, M. Ilinca, E*fficient implementation of digital signal processing algorithms with field programmable gate arrays*, Proceedings of the 6th International Conference on Management of Technological Changes MTC2009, SEPTEMBER 3rd – 5th, 2009 ALEXANDROUPOLIS, GREECE, pp 613-616, ISBN 978-960-89832-6-7
10. **C. Damian**, C. Fosalau, C. Zet, *Wireless Communication System for Environmental Monitoring*, 1st IMEKO TC19 Symposium on Measurements and Instrumentation for Environmental Monitoring, Iasi, Romania, 19 - 21 September 2007, pp 108-112, ISBN 978-973-667-263-7

b) Teza de doctorat

1. **Cercetări privind tehnicile de măsurare cu procesare numerică de semnal,** titlu obținut în data de 27.11.2009, conducător de doctorat prof.dr.ing. Mihai Crețu, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Universitatea Tehnică "Gheorghe Asachi" din Iași

c) Brevete de invenție și alte titluri de proprietate intelectuală

d) Cărți și capitole în cărți

1. **C. Damian**, M. Ilinca, *Lucrări practice de programarea calculatoarelor. Limbajul C – aplicații*, ISBN 978-606-687-290-4, Editura Tehnopress, Iași, 197 pg., 2016
2. M. Ilinca, **C. Damian**, *Programarea calculatoarelor pentru ingineri. Limbajul C. Note de curs*, Editura Tehnopress, Iași, ISBN 978-606-687-289-8, 218 pg., 2016
3. G. Chiriac, R. Ilinca, **C. Damian**, T. Dumitriu, *Instrumente informatice fundamentale pentru ingineri*, Editura Tehnopress, Iasi, ISBN 978-606-687-070-2, 294 pg., 2014
4. **C. Damian,** *Tehnici de procesare numerică a semnalelor în instrumentaţie*, Editura Politehnium, Iaşi, ISBN: 978-973-621-320-5, 132pg., 2011

e) Articole/studii publicate în extenso, în reviste din circuitul științific internațional

1. **C. Damian**, M. Bordei, E.A. Tulbure, N. Munteanu, et. al., *Composite Materials for Greenhouse Applications*, MATERIALE PLASTICE, pp. 248-252, ISSN: 0025-5289, Decembrie, 2013, Bucuresti, Romania
2. C. Fosalau, **C. Damian**, C. Zet, *A high performance strain gage based on the stressimpedance effect in magnetic amorphous wires*, Sensors and Actuators A: Physical, pp. 105-110, ISSN 0924-4247, 2013
3. **C. Damian**, C. Fosalau, S*ources of indoor noise and options to minimize adverse human health effects*, Environmental Engineering and Management Journal, March 2011, Vol.10, No.3, pp. 393-400, Print ISSN: 1582-9596

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5. **C. Damian**, D. Petrisor, C. Fosalau, C. Zet, *Landslide Survailance Using A Wirelless Measurement Grid*, în curs de apariţie, în Environmental Engineering and Management Journal, FI - 1,065. Scrisoare de acceptare şi recenzii în dosarul de concurs.
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7. E. Danila, **C. Damian,** D.D. Lucahe, E*nergy management in a laboratory computer grid*, Buletinul AGIR nr. 3/2012, iunie-august, ISSN-L 1224-7928, Online: ISSN 2247-3548, BDI: INDEX COPERNICUS INTERNATIONAL
8. C. Seliman, O. Plopa, **C. Damian**, M. Creţu, U*rban environment influence on the surface water quality in the city of Iasi*, publicată în volumul Lucrări Ştiinţifice, Seria Agronomie (cotata B+ CNCSIS şi recenzată CAB International - Anglia), nr. 52, sub egida editurii "Ion Ionescu de la Brad", 2009, ISSN 1454-7414, 461-466
9. O. Plopa, C. Seliman, **C. Damian**, E*nvironmental parameters laboratory measurements with virtual instrumentation*, publicată în volumul Lucrări Ştiinţifice, Seria Agronomie (cotata B+ CNCSIS şi recenzată CAB International - Anglia), nr. 52, sub egida editurii "Ion Ionescu de la Brad", 2009, ISSN 1454-7414, 436-441

f) Articole/studii publicate în extenso, în volumele conferințelor internaționale de specialitate

1. **C. Damian**, L. Alboaie, A. Iftene, *Using WSN and Mobile Apps for Home and Office Ambient Monitoring and Control*, International Conference on Human-Computer Interaction, pp. 42-46, 2501-9422, 8-9 Septembrie, 2016, Iasi, Romania
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4. E. Lunca, **C. Damian**, A. Salceanu, *EMF exposure measurements on 4G/LTE mobile communication networks*, EPE 2014, October, 16-18, 2014, Iasi, Romania
5. C. Zet, C. Fosalau, D. Petrisor, **C. Damian**, *Landslide transducer based on amorphous wire strain gauges*, 19th IMEKO TC-4 Measurements of Electrical Quantities, ISBN-10: 84-616-5438-2, Iulie, 2013, Barcelona, Spania
6. D. Petrisor, C. Fosalau, C. Zet, **C. Damian**, *Measurement of Landslide Displacement and Orientation using Strain Gauges Based on Amorphous Magnetic Microwires*, 19th IMEKO TC-4 Measurements of Electrical Quantities, pp. 655-660, ISBN-10: 84-616-5438-2, Iulie, 2013, Barcelona, Spania
7. C. Fosalau, C. Zet, D. Petrisor, **C. Damian**, *A New Type of Highly Sensitive Strain Gage Based on Microstructured Magnetic Materials*, 2013 International Symposium on Robotic and Sensors Environments, ROSE 2013, October, 21-23, 2013, Washington DC, USA
8. **C. Damian**, E. Lunca, C. Fosalau, *Virtual Instrumentation for Measuring Amorphous Magnetic Wires Strain Gauges Characteristics*, REV2012 - Remote Engineering & Virtual Instrumentation, 4-6 July 2012, IEEE Catalog Number: CFP1249T-USB, ISBN: 978-1-4673-2541-7, 195-199, Bilbao, Spain
9. E. Lunca, **C. Damian**, F. Mariut**,** *Simplifying the Communication with I2C Devices Using LabVIEW and the PC's Parallel Port*, REV2012 - Remote Engineering & Virtual Instrumentation, 4-6 July 2012, IEEE Catalog Number: CFP1249T-USB, ISBN: 978-1-4673-2541-7, 187-190, Bilbao, Spain
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12. **C. Damian**, E. Lunca, *A low area FIR filter for FPGA implementation*, 34th International Conference on Telecommunications and Signal Processing (TSP), 2011, 18-20 Aug. 2011, ISBN: 978-1-4577-1410-8, pp. 521 – 524, Budapesta, Ungaria
13. E. Danila, D.D. Lucache, **C. Damian**, *Risks in change management of engineering higher education*, The 6th International Seminar Quality Management in Higher Education – QMHE 2010, pp. 51-54, ISBN: 978-973-662-568-8
14. **C. Damian**, C. Zet, C. Fosalau, *Hybride networks for remote measurements and control in restricted areas*, Proceedings of the 6th International Conference on Management of Technological Changes MTC2009, SEPTEMBER 3rd – 5th, 2009 ALEXANDROUPOLIS, GREECE, pp 481-484, ISBN 978-960-89832-6-7
15. C. Zet, C. Fosalau, **C. Damian**, N*anomaterials – a new challenge in building miniaturized measurement devices*, Proceedings of the 6th International Conference on Management of Technological Changes MTC2009, SEPTEMBER 3rd – 5th, 2009 ALEXANDROUPOLIS, GREECE, pp 489-492, ISBN 978-960-89832-6-7
16. **C. Damian**, C. Fosalau, C. Zet, M. Ilinca, E*fficient implementation of digital signal processing algorithms with field programmable gate arrays*, Proceedings of the 6th International Conference on Management of Technological Changes MTC2009, SEPTEMBER 3rd – 5th, 2009 ALEXANDROUPOLIS, GREECE, pp 613-616, ISBN 978-960-89832-6-7

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18. C. Zet, **C. Damian**, C. Fosalau and I. Enculescu, *Remote automated system for nanowire electrodeposition*, 11th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2008, Brasov, ROMANIA, MAY 22-23, 2008, pp 101-105, ISBN 978-973-131-028-2
19. C. Zet, O. Plopa, **C. Damian**, C. Fosalau, *Virtual impedance spectroscopy for electrolytical cells*, 16th IMEKO - TC4 International Symposium – Exploring New Frontiers of Instrumentation and Methods for Electrical and Electronic Measurements, Sept. 22-24, 2008 - Florence, Italy, pp 651-656, ISBN 978-88-903149-3-3
20. D. Costineanu, C. Fosalau, **C. Damian**, O. Plopa, *Triangulation-based 3D image processing method and system with compensating shadowing errors*, 16th IMEKO - TC4 Symposium – Exploring New Frontiers of Instrumentation and Methods for Electrical and Electronic Measurements, Sept. 22-24, 2008 - Florence, Italy, pp 460-463, ISBN 978-88-903149-3-3
21. **C. Damian**, C. Zet, C. Fosalau, M. Cretu, *Real, Reactive and Apparent Power Computing Using FPGA and PWM Intermediary Conversion*, 16th IMEKO - TC4 Symposium – Exploring New Frontiers of Instrumentation and Methods for Electrical and Electronic Measurements, Sept. 22-24, 2008 - Florence, Italy, pp 301-304, ISBN 978-88-903149-3-3
22. C. Zet, **C. Damian**, C. Foşalău, V. Ilie, M. Creţu, *Advances in remote monitoring*, 5th International Conference MTC 2007 Management of Technological Changes, August 25th - 26th, 2007 Alexandroupolis, Greece, pp 147-156, ISBN 978-960-8932-0-5
23. A.S. Fiorillo, C. Fosalau, G. Scarfone, **C. Damian**, *A Remote Web System for Testing PVDF Sensors*, 15th IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation, Iasi, Romania, 19 - 21 September 2007, pp 509-513, ISBN 978-973-667-260-6
24. **C. Damian**, C. Zet, C. Fosalau, *Virtual Potentiostat*, 15th IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation, Iasi, Romania, 19 - 21 September 2007, pp 596-600, ISBN 978-973-667-260-6
25. **C. Damian**, C. Fosalau, C. Zet, *Wireless Communication System for Environmental Monitoring*, 1st IMEKO TC19 Symposium on Measurements and Instrumentation for Environmental Monitoring, Iasi, Romania, 19 - 21 September 2007, pp 108-112, ISBN 978-973-667-263-7
26. C. Zet, **C. Damian**, C. Fosalau, *New type ADC using PWM intermediary conversion*, 12th Workshop on ADC Modelling and Testing, Iasi, Romania, 19 - 21 September 2007, pp 113-117, ISBN 978-973-667-264-4
27. **C. Damian**, C. Foşalău, C. Zet, M. Creţu *Methods for Compensation of analog-to-digital converters errors*, Proceedings of the 5th International conference on electromechanical and power systems SIELMEN 2005, Chisinau-Moldova, 6-8 oct. 2005, pp. 304-307, ISBN 973-716-208-0
28. C. Zet, **C. Damian**, C. Foşalău *An FPGA based peak detector for magnetostrictive current sensors*, IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation, Jurata-Gdynia, Poland, 12th-15th September, 2005, pp. 179-183, ISBN 83-89786-37-0
29. C. Foşalău, C.Zet, M.Temneanu, **C. Damian**, *Implementation of a measurement function using programmable logic devices*, Proceedings of the 4th International Conference on Electromecanical and Power Systems SIELEMEN 2003, Chişinău, September 26-27, 2003, pp.121-123, ISBN 9975-9704-9-4

g) Alte lucrări și contribuții științifice

1. **C. Damian**, *Sistem de monitorizare a parametrilor de mediu utilizand tehnologii wireless pentru transmiterea datelor*, Revista Tehnica Instalatiilor, pp. 18-20, ISSN 1582-6244, Anul X - Nr.2 (76), 2010, Bucuresti, Romania
2. V. Plopan, **C. Damian,** *Sistem automat de monitorizare si prognoza consumuri energetice*, Revista Masurari si Automatizari, pp. 48-49, ISSN 1582-2834, Anul IX - Nr. 3, 2009, Bucuresti, Romania
3. **C. Damian**, C. Fosalau, *Utilizarea circuitelor logice programabile în cadrul sistemelor digitale*, Concursul National de Referate si Comunicări Stiintifice „Stefan Procopiu" 2009, Piatra Neamt, Romania
4. **C. Damian**, *Sisteme moderne pentru monitorizarea parametrilor de mediu*, Simpozionul Naţional "Viitorul este în mâinile noastre", ediţia I, Liceul Teoretic G. Ibrăileanu, Iaşi, 2009.
5. **Proiecte de cercetare-dezvoltare:**
    i. Cercetari privind tehnicile de masurare cu procesare numerica a semnalului, PN II TD, 59/2007, 2007-2009, 3 ani, **director proiect**
    ii. Metodologie dielectrica nedistructiva, neinvaziva, comparativa de detectare rapida a ingredientilor cu potential factor de risc pentru sanatate din produsele alimentare, PN II Parteneriate, 51-015/2007, 2007-2010, 4 ani, membru în echipa de cercetare
    iii. Sistem complex de monitorizare a alunecarilor de teren utilizând traductoare bazate pe noi materiale şi tehnologii, PN II Parteneriate, 63/2012, 2012-2016, 5 ani, membru în echipa de cercetare
    iv. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil, PN III ERA NET, 83/2016, 2016-2018, 1 an, membru în echipa de cercetare
    v. Extinderea posibilitatilor de masurare continua on-line a parametrilor poluanti din apa si aer pentru un laborator de mediu, CEEX, 110/10.08.2006, 2006-2007, 2 ani, membru în echipa de cercetare

vi. Sistem inteligent de irigare de precizie implementabil pe structuri automate cu deplasare circulara sau liniara, CEEX, 51/2006, 2006-2008, 3 ani, membru în echipa de cercetare
vii. Remote instrumentation in next-generation grids, CEEX, 132/2007, 2007-2008, 2 ani, membru în echipa de cercetare
viii. Dezvoltarea parteneriatelor c/d prin includerea excelentei romanesti, în vederea promovării de proiecte comune în domeniul materialelor avansate nanostructurate destinate ecranelor de protectie la radiatii electomagneice in domeniul ghz, CEEX, 202/2006, 2006-2008, 3 ani, membru în echipa de cercetare
ix. Ecrane pentru constructii speciale bazate pe structuri chiral-fagure, CEEX, 46/2006, 2006-2008, 3 ani, membru în echipa de cercetare
x. Sistem integrat de inspectie video-inteligenta a materialelor textile dezvoltat prin metode virtuale de procesare a imaginii, CEEX, 57/2006, 2006-2008, 3 ani, membru în echipa de cercetare
xi. Nanofire de oxizi metalici semiconductori magnetici diluati, Colborative CEEX, 1/2006, 2007-2008, 2 ani, membru în echipa de cercetare
xii. Electrospining de inalta eficienta, Colborative PN II, 159/2012, 2012-2016, 5 ani, membru în echipa de cercetare
xiii. Dezvoltarea parteneriatelor C/D in vederea promovarii unor proiecte europene in domeniul sistemelor distribuite de monitorizare a mediului, CEEX, 201/2006, 2006-2008, 3 ani, membru în echipa de cercetare
xiv. Fotodetectori bazati pe nanofire multisegment, Colborative PN II, 11-060/2007, 2008-2010, 3 ani, membru în echipa de cercetare
xv. Senzori bazati pe elemente de detectie nanometrice pentru aplicatii în nano-medicina, Colborative PN II, 12-109/2008, 2009-2011, 3 ani, membru în echipa de cercetare
xvi. Microsenzori acustici pe baza de nanofire magnetostrictive pentru aplicatii medicale, Colborative PN II, 14-114/2008, 2011-2011, 1 an, membru în echipa de cercetare
xvii. Microsenzori magnetici implantabili pentru aplicaţii medicale (MEDISENS), Colborative PN II, 12-110/2008, 2011-2011, 1 an, membru în echipa de cercetare
xviii. Microtraductoare cu elemente sensibile bazate pe nanofire magnetice, Colborative CEEX, 75-157/2008, 2009-2011, 3 ani, membru în echipa de cercetare
xix. Nanofire multistrat cu structura de tip valva de spin. Proprietati de magnetorezistenta gigant., CNCSIS, 21/2005, 2006-2007, 2 ani, membru în echipa de cercetare
xx. Sistem automat de iradiere a filmelor polimerice cu un numar prestabilit de ioni, CNCSIS, 164/2006, 80/2007, 2006-2007, 2 ani, membru în echipa de cercetare

Data: 11.05.2017

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