

INFORMAȚII PERSONALE

Daniel Moga

📍 Str. Observatorului, nr. 2, Cluj-Napoca, 400500, Romania

✉ daniel.moga@aut.utcluj.ro

EXPERIENȚA PROFESIONALĂ

Octombrie 2009 - prezent

Profesor universitar

Universitatea Tehnica din Cluj-Napoca, Departamentul Automatica

• Activități didactice și de cercetare
Tipul sau sectorul de activitate Educație / Ingineria sistemelor

Octombrie 2006 –
Octombrie 2009

Conferențiar

Universitatea Tehnica din Cluj-Napoca, Departamentul Automatica

• Activități didactice și de cercetare
Tipul sau sectorul de activitate Educație / Ingineria sistemelor

Aprilie 1999 –
Octombrie 2006

Asistent, Șef lucrări

Universitatea Tehnica din Cluj-Napoca, Departamentul Automatica

• Activități didactice și de cercetare
Tipul sau sectorul de activitate Educație / Ingineria sistemelor

Octombrie 1996 –
Aprilie 1999

Asistent

Universitatea "Babes-Bolyai" Cluj-Napoca

• Activități didactice și de cercetare
Tipul sau sectorul de activitate Educație / Sisteme informaționale geografice (GIS), Sisteme de senzori

Septembrie 1995 –
Octombrie 1996

Cercetător

IPA SA Cluj-Napoca, Strada Zorilor nr. 15, Cod poștal 400335, Cluj, România

• Cercetare și dezvoltare
Tipul sau sectorul de activitate Sisteme automate de monitorizare și control

EDUCAȚIE ȘI FORMARE

2005

Doctor in inginerie electrica

Universitatea Tehnică din Cluj-Napoca, Facultatea de Inginerie Electrică

Disciplinele principale studiate /competențe profesionale dobândite: *Research on smart sensor systems and applications*

1995

Inginer

Universitatea Tehnică din Cluj-Napoca, Facultatea de Automatica și Calculatoare, Specializarea: Calculatoare și Tehnologia Informației

COMPETENTE PERSONALE

Limba(i) maternă(e)

Romana

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleza	C2	C2	C2	C2	C2
Franceza	C1	C1	B2	B2	B1
Italiana	C1	C1	B1	B1	B1
Germana	B1	B1	B1	B1	A1

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimental
Cadrul european comun de referință pentru limbi străine

Training GIS - Mai 1998, Free University of Amsterdam, Olanda și Februarie 1999, University of Toronto, Canada
 Microelectronics - Ianuarie 2001, Ecole Polytechnique Federale de Lausanne, Elveția
 Smart Sensors- Mai 2002, Delft University of Technology, Olanda
 Design for Test, Noiembrie 2004, Philips Research Laboratories, Eindhoven

Competențe organizaționale/manageriale

- Leadership și management organizațional, abilități interpersonale dovedite ca manager / director în proiecte de cercetare și dezvoltare cu parteneri din mediul academic și companii din industrie. Bună capacitate de comunicare, dobândită și dovedită în activitatea didactică, de cercetare și cea managerială

ANEXE

Anexa 1. Proiecte de cercetare-dezvoltare conduse

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Prof.dr.ing. Daniel MOGA

09.11.2020

Anexa 1. Proiecte de cercetare-dezvoltare conduse

Program/Proiect	Funcție	Perioadă
<i>Echipament de chimiohipertermie intraperitoneala dezvoltat prin paradigma Cyber-Physical System, PN-II-RU-TE-357/01.10.2015, http://hiper-cps.hpm.ro/</i>	Director proiect	2015-2017
<i>Sistem integrat de senzori inteligenti pentru monitorizarea constructiilor hidrotehnice de importanta strategica, PN-II-PT-PCCA-2011-nr.71, http://hydrosens.hpm.ro/</i>	Director proiect	2012-2016
<i>Research on Test Compression and LBIST, Contract de cercetare UTCN-Philips Semiconductors, 2005-2008</i>	Director proiect	2005-2008
<i>Vision based systems for monitoring and inteligent control, X2C21/ 18.07.06</i>	Director proiect	2006-2008
<i>Algorithms for collecting, storing and wireless transeceiving data coming from mobile sensors, Contract de cercetare UTCN – MultiPRO Amsterdam, 17.12.2007</i>	Director proiect	2007-2008
<i>Sistem de management al energiei obtinut din surse regenerabile, pentru mici comunitati izolate – REMSIS, PN-II-PT-PCCA-2013-4-1462, Director proiect: prof. dr. eng. Dorin Petreus</i>	Responsabil proiect	2014-2016
<i>Research on sensors technology and design algorithms for signal processing, Contract de cercetare nr.22520/30.11.2005 UTCN – MultiPRO Amsterdam 2005-2006</i>	Responsabil proiect	2005-2006
<i>Research-development contract nr. 1595/31.01.2005, UTCNTetraco International Netherlands.</i>	Responsabil proiect	2005-2006
<i>Research Project SCABOR, jointly developed by Volkswagen AG and Technical University of Cluj-Napoca</i>	Responsabil proiect	2002-2003
<i>Complex architecture for monitoring and transfer of medical data. CNCSIS 1019</i>	Responsabil proiect	2008-2010

Anexa 2. Brevete
Brevete naționale

- OSIM 123261 - *System for Monitoring the Progressive Loading of Lower Limb in Post-Traumatic Rehabilitation*, 2011
- OSIM 122976 - *System And Process For Indirectly Measuring Mass Of Objects In Motion*, 2010
- OSIM 122986 - *Contactless Coupling Circuit*, 2010
- OSIM 122380- *Method And Device For Measuring Rotation Speed In Highly Disturbing Media*, 2009
- OSIM 123490 - *Wireless System for Remote Tilt Measurement*, 2012

Anexa 3. Premii pentru activitatea științifică

- Diploma of excellence ANCS, June 2010*
- Award of excellence in scientific research of U.T.C.N, Cluj-Napoca, 15.01.2007*
- Daimler Chrysler Innovation Preis, Bruxelles, 2006*

Anexa 4. Cărți și lucrări
Cărți și capitole de cărți

- D.Moga, P. Dobra, *Smart Sensor Systems*, Editura Mediamira, ISBN 973-713-061-8, 2006
- D.Moga, G. Mocanu, R.A.Munteanu, *Vision Based Measurement and Control*, Editura Mediamira, ISBN 978-973-713-233-8, 2009
- T. Dragomir, M. Voicu, D. Moga. Chapter 1: *Fundamente Matematice in Automatica*, Vol. I, pp. 1-104, Coordonator: Ioan Dumitrache, Bucuresti, 2009, ISBN: 978-973-1883-4 Editura Academiei Romane 2009

Articole in reviste cotate si in volumele unor manifestari stiintifice indexate ISI proceedings

- R. L. Sumalan, N. Stroia, D. Moga, V. Muresan, A. Lodin, T. Vintila, C. A. Popescu. A Cost-Effective Embedded Platform for Greenhouse Environment Control and Remote Monitoring. *Agronomy* 2020, 10(7), 936; <https://doi.org/10.3390/agronomy10070936>.
- C. Lungoci, D. Moga, V. Muresan, D. Petreus, N. Stroia, R. Moga, M. Munteanu, I. Raus, V. Murtean, A. I. Mironiuc. Hyperthermic Intraperitoneal Chemotherapy Approach Based on Cyber-Physical System Paradigm, *Journal of Control Engineering and Applied Informatics*, vol 17, no 3, pp. 50-59, 2015.
- F. A. Hrebenciuc, D. Moga, D. Petreus, Z. Barabas, R. Moga. Combined Analytical and Numerical Approach to Study Coil Arrays for Contactless Charging of Batteries in Active Transponders, *Electronics and Electrical Engineering*, vol. 123, no. 7, 2012, pp. 37-42, ISSN 1392-1215, DOI:10.5755/j01.eee.123.7.2372.
- F. Hrebenciuc, N. Stroia, D. Moga, Z. Barabas, A Low Cost Approach to Large Smart Shell Setups, *Advances in Electrical and Computer Engineering*, vol. 11, no. 4, pp. 117-122, 2011, ISSN: 1582-7445, DOI: 10.4316/AECE.2011.04019
- D. Petreus, D. Moga, A. Rusu, T. Patarau, M. Munteanu. Photovoltaic System with Smart Tracking of the Optimal Working Point, *Advances in Electrical and Computer Engineering*, vol. 10, no. 3, pp. 40-47, 2010, ISSN: 1582-7445, DOI: 10.4316/aece.2010.03007
- Moga D., Munteanu R.A., Dumitrean M., Dobra M., Moga R., Wireless System for Remote Tilt Measurement in Monitoring and Control Applications, *Advances in Electrical and Computer Engineering*, vol. 8, no. 2, pp. 32 – 36, 2008, ISSN: 1582-7445, DOI: 10.4316/AECE.2008.02006
- Petreus D., Moga D., Galatus R., Munteanu R.A., Modeling and Sizing of Supercapacitors, *Advances in Electrical and Computer Engineering*, vol. 8, no. 2, pp. 15 – 22, 2008, DOI: 10.4316/AECE.2008.02003
- N. Stroia, D. Moga, E. Vitan, G. Cosovici, C. Lungoci, I. Kovacs, M. Mircea. "Internet based SCADA platform for monitoring strategic hydrotechnical structures", 20th IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2016, May 19-21, Cluj-Napoca, Romania, 2016. DOI

- 10.1109/AQTR.2016.7501397
12. D. Moga, D. Petreus, N. Stroia. "Web based solution for remote monitoring of an islanded microgrid", The 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON2016), October 24-27, 2016, Florence, Italy
 13. R Galatus, D. Moga, V. Cojocaru, N. Cennamo, L. Zeni. "Fuzzy control system based on SPR-POF fiber sensor for chlorine monitoring in water", Informatics, Geoinformatics and Remote Sensing Conference Proceedings, SGEM 2016, Vol II, DOI: 10.5593/SGEM2016/B22/S10.114
 14. Clitan I., Muresan V., Abrudean M., Moga D., Valean H., Lungoci C., Mironiuc I.A. "Flow and temperature control for an innovative hyperthermic intraperitoneal chemotherapy equipment", 2015 19th International Conference on System Theory, Control and Computing, ICSTCC 2015 - Joint Conference SINTES 19, SACCS 15, SIMSIS 19. DOI: 10.1109/ICSTCC.2015.7321287
 15. Muresan, V., Abrudean, M., Valean, H., Colosi, T., Unguresan, M.-L., Sita, V., Clitan, I., Moga, D. "Neural Modeling and Control of a ¹³C Isotope Separation Process", 12th International Conference on Informatics in Control, Automation and Robotics (ICINCO), 21 – 23 July, 2015, Colmar, Franța, vol. 1, pp. 254-263. DOI: 10.5220/0005549002540263
 16. M.L. Unguresan, V. Muresan, M. Abrudean, I. Clitan, T. Colosi, D. Moga. PID Control of a Chemical Absorption Process", in 20th International Conference on Control Systems and Computer Science (CSCS20-2015), (Bucharest, Romania), pp. 104 – 111, May 27 - 29 2015. DOI:10.1109/CSCS.2015.119
 17. D. Moga, I. V. Sita, N. Stroia, P. Dobra, R. Moga, and D. Petreus, "Sensing and control strategies in tracking solar systems," in 20th International Conference on Control Systems and Computer Science (CSCS20-2015), (Bucharest, Romania), pp. 989 – 995, May 27 – 29 2015. DOI: 10.1109/CSCS.2015.143
 18. D. Moga, N. Stroia, D. Petreus, R. Moga and R. A. Munteanu. "Embedded Platform for Web-based Monitoring and Control of a Smart Home". In Proceedings of 2015 IEEE 15th International Conference on Environment and Electrical Engineering Conference, pp. 1256-1261, ISBN 978-1-4799-7992-9, June 10-13, 2015. DOI: 10.1109/EEIC.2015.7165349
 19. I.V. Sita, P. Dobra, D. Moga, R. Manescu, V. Muresan, I. Clitan. "Optimization of residential heating systems using accumulators". In Proceedings of 2015 IEEE 15th International Conference on Environment and Electrical Engineering Conference, pp. 2165 - 2170, ISBN 978-1-4799-7992-9, June 10-13, 2015. DOI:10.1109/EEIC.2015.7165514
 20. I. Clitan, D. Moga, V. Muresan, N. Stroia, I.V. Sita, C. Lungoci, I.A. Mironiuc. "Digital temperature control for an hyperthermic intraperitoneal chemotherapy equipment," in 20th International Conference on Control Systems and Computer Science (CSCS20-2015), (Bucharest, Romania), pp. 98 – 103, May 27 - 29 2015. DOI:10.1109/CSCS.2015.63
 21. Clitan I., Muresan V., Moga D., Sita V., Lungoci C. "Measured signal identification and temperature controller design for a HIPEC device", 2015 38th International Conference on Telecommunications and Signal Processing, TSP 2015, pp. 304-308. DOI: 10.1109/TSP.2015.7296273
 22. Clitan I., Lungoci C., Muresan V., Moga D., Sita V. A robust temperature controller design for an innovative hyperthermic intraperitoneal chemotherapy equipment (2015) ICINCO 2015 - 12th International Conference on Informatics in Control, Automation and Robotics, Proceedings, 2, pp. 84-91.
 23. P. Dobra, M. Dobra, D. Moga, V.I. Sita, R.A. Munteanu. *Model based fault detection for electrical drives with BLDC motor*. IEEE International Conference on Automation, Quality and Testing, Robotics, 2014 . DOI: 10.1109/AQTR.2014.6857849
 24. T. Patarau, D. Petreus, R. Etz, D. Moga. *Sizing photovoltaic-wind smart microgrid with battery storage and grid connection*. IEEE International Conference on Automation, Quality and Testing, Robotics, 2014 . DOI: 10.1109/AQTR.2014.6857912
 25. M. Munteanu, C. Rusu, D. Moga, R. Moga and G. Toni. *EMG Signals Case Study: A Time and Frequency Domain Analysis*, In IFMBE Proceedings of International Conference on Advancements of Medicine and Health Care through Technology, 2011, Volume 36, Part 3, 202-205, DOI: 10.1007/978-3-642-22586-4_44
 26. F. Neaga, I. Raus, R. Moga, D. Moga, S. Vlad, N. Stroia, M. Munteanu. *Structured Light Based Imaging Architecture for Guided Fracture Reduction*. International Conference on Advancements of Medicine and Health Care through Technology (IFMBE Proceedings); vol. 44, pp 265-270 , 2014, DOI: 10.1007/978-3-319-07653-9_54
 27. C. Lungoci, I. Raus, T. Oniu, D. Moga, N. Stroia, V. Muntean, D. Petreus, I. A. Mironiuc. *Assessment of temperature distribution in intraperitoneal chemohyperthermia*. International Conference on Advancements of Medicine and Health Care through Technology (IFMBE Proceedings), vol. 44, pp 193-196 , 2014, DOI: 10.1007/978-3-319-07653-9_39
 28. C. Cristea, A. Florea, R. Galatus, E. Bodoki, R. Sandulescu, D. Moga, D. Petreus. *Innovative Immunosensors for Early Stage Cancer Diagnosis and Therapy Monitoring*. The International Conference on Health Informatics (IFMBE Proceedings), vol. 42, pp 47-50, 2014, DOI: 10.1007/978-3-319-03005-0_13
 29. D. Petreus, D. Moga, A. Rusu, T. Patarau, S. Daraban. "A Maximum Power Point tracker for a photovoltaic system under changing luminosity conditions", In IEEE International Symposium on Industrial Electronics (ISIE), 4-7 July 2010, Bari, pp. 556 – 561, DOI: 10.1109/ISIE.2010.5637829.
 30. F. Neaga, D. Moga, D. Petreus, M. Munteanu and N. Stroia. *A Wireless System for Monitoring the Progressive Loading of Lower Limb in Post-Traumatic Rehabilitation*. In IFMBE Proceedings of International Conference on Advancements of Medicine and Health Care through Technology, 2011, Volume 36, Part 1, 54-59, DOI: 10.1007/978-3-642-22586-4_13
 31. Petreus D., Ciocan I., Rusu A., Moga D., A Quasi Real Time Simulator for Maximum Power Point Tracking Algorithms, 32nd International Spring Seminar on Electronics Technology (ISSE 2009), 2009, Brno, Czech Republic, DOI: 10.1109/ISSE.2009.5207007
 32. Petreus, D.; Farcas, C.; Dobra, P.; Moga, D., *Torque measurement system design*. IEEE International Conference on Automation, Quality and Testing Robotics, AQTR 2008, Volume 1, 22-25 May 2008 Page(s):174 – 177
 33. Stroia, N.; Moga, D.; Dumitrescu, M.; Petreus, D.; Dobra, M.; *Low cost environment for teaching and experimenting current based testing*, IEEE International Conference on Automation, Quality and Testing, Robotics, 2008. AQTR 2008 Volume 1, 22-25 May 2008 Page(s):208-211
 34. Dobra, P.; Petreus, D.; Moga, D.; Trusca, M.; Tomesc, L.; Duma, R.; *Low-cost embedded solution for auto-tuning DC motor controllers*, IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2008, Volume 2, 22-25 May 2008 Page(s):280 - 284
 35. R. Munteanu, D. Moga, M. Ivan, *Vision based measurement systems*, VIS'08 Proceedings of the 1st WSEAS International Conference on Visualization, Imaging and Simulation, 2008, Bucharest, ISBN: 978-960-474-022-2
 36. P. Dobra, R. Duma, D. Moga, R.A. Munteanu, M. Munteanu, *Rapid control prototyping applications using TI C2000 DSP*, ICAI'08 Proceedings of the 9th WSEAS International Conference on International Conference on Automation and Information , 2008, Bucharest
 37. P. Dobra, L. Nagy-Kulcsar, M. Truşcă, D. Moga, R. Balan, *Stability of the fast voltage control loop in DC-DC converters*, In Proceedings of International Conference on Automation, Quality and Testing, Robotics, pp. 107-112, vol. I, 25-28 May, 2006, Cluj-Napoca, Romania.
 38. Nagy-Kulcsar, L.; Dobra, P.; Moga, D.; Dumitrescu, M.; Stroia, N.; *Developing Simulation Models of Open Distributed Control System - Design Concepts Based on Foundation Fieldbus*, IEEE International Conference on Automation, Quality and Testing, Robotics, 2006, Volume 1, 25-28 May 2006 Page(s):132 - 137
 39. M. Munteanu, D. Moga, R. A. Munteanu, R. Ciupa, and L. Fioca. *Optimal Coil Geometry for Transcutaneous Power Transfer to Implanted Medical Devices*. In Proceedings of 2nd European Medical and Biological Engineering Conference. Vienna, Austria, December 04 - 08, 2002.
 40. D. Moga, G. Lazza, M. Munteanu, R. A. Munteanu, and R. Fail. *A Low Cost Distributed Architecture for Humidity and Temperature Monitoring in Healthcare Facilities*. In Proceedings of 2nd European Medical and Biological Engineering Conference. Vienna, Austria, December 4 - 8, 2002.
 41. P. Dobra, D. Moga. "Computation of proper and reduced order controllers via H(infinity) techniques". International-Federation-of-Automatic-Control Symposium on Robust Control Design, Prague, Czech Republic, June 21-23, 2000, ROBUST CONTROL DESIGN 2000, Book Series: IFAC SYMPOSIA SERIES Volume: 1-2, pp. 471-475

Articole in reviste si volumele unor manifestari stiintifice indexate in alte baze de date internationale (BDI)

1. N. Stroia, D. Moga, V. Muresan, and A. Lodin. Estimating Environmental Variables in Smart Sensor Networks with Faulty Nodes. In Proceedings of the 9th International Conference on Smart Cities and Green ICT Systems 2020 - Volume 1: SMARTGREENS, ISBN 978-989-758-418-3, pages 67-73. DOI 10.5220/0009394500670073
2. A. Lodin, D. Moga, N. Stroia, D. Petreus, V. Muresan, R. A. Munteanu, L. Vladareanu. *Modelling and simulation of a remote controlled mechatronic device*. Periodicals of Engineering and Natural Sciences ISSN 2303-4521 Vol. 7, No. 1, June 2019, pp.255-260. DOI: <http://dx.doi.org/10.21533/pen.v7i1.372.g262>
3. R. Galatus, D. Petreus, D. Moga, T. Marita, N. Stroia. *Extending Battery Life Time in the Wireless Sensor Applications with Fluorescent Optical Fiber Concentrator*, 2018 IEEE International Instrumentation and Measurement Technology Conference (I2MTC) - Sensors and Transducers, May 13-17, Houston, USA. DOI. 10.1109/I2MTC.2018.8409560
4. V. Muresan, D. Moga, D. Petreus, M. Abrudean, N. Stroia, R. Moga. *Fault Detection and Fault Tolerance Mechanism for DC/DC Converters in Microgrids*, IFAC-PapersOnLine, Volume 51, Issue 28, Pages 666-671, 2018. <https://doi.org/10.1016/j.ifacol.2018.11.781>
5. C-B Rusu, C. Lungoci, D. Moga, G. Cosovici, N. Stroia. *Modelling a Temperature Calibration System for Medical Probes*, 2017 21st International Conference on Control Systems and Computer Science (CSCS), 29-31 May 2017, Bucharest, Romania DOI: 10.1109/CSCS.2017.11
6. V. Muresan, I. Clitan, D. Moga, R. Moga, G. Cosovici, N. Stroia, C. Lungoci, I.A. Mironiuc, F. Neaga. *Modeling and control of the temperature for cytotstatic solutions used in surgical procedures*. 2016 International Conference on Control Decision and Information Technologies (CoDIT'16), April 6-8, 2016, Malta, DOI: 10.1109/CoDIT.2016.7593649
7. D. Moga, D. Petreus, V. Muresan, N. Stroia, G. Cosovici *Optimal generation scheduling in islanded microgrids*, IFAC and CIGRE/CIGRE Workshop on Control of Transmission and Distribution Smart Grids (CTDSSG'16), October 11-13, Prague, Czech Republic, 2016
8. V. Muresan, M. Abrudean, D. Moga. *Modeling, Simulation and Control of a Nonlinear Distributed Parameter Isotope Separation Process*, IFAC PAPERSONLINE, VOLUME 48, ISSUE 30, Pages 191-196 DOI: 10.1016/j.procs.2015.08.550
9. C. Lungoci, V. Muresan, D. Moga, I. Clitan, R. Moga, V. Sita, T. Oniu, A. Mironiuc. *Advanced temperature control for innovative HIPEC equipment*. Procedia Computer Science, vol. 64, 2015, pp. 497-505. DOI: 10.1016/j.procs.2015.08.550 Conference on ENTERprise Information Systems/International Conference on Project MANagement/ Conference on Health and Social Care Information Systems and Technologies, CENTERIS/ProjMAN / HCist 2015 October 7-9, 2015, Vilamoura, Algarve, Portugal
10. I. Clitan, D. Moga, C. Lungoci, V. Muresan, N. Stroia, *Experimental Identification of Heating Process from Hyperthermic Intraperitoneal Chemotherapy (HIPEC) Equipment*, Applied Mechanics and Materials, Vol. 772, pp. 626-630, Jul. 2015
11. I. Clitan, M. Abrudean, V. Muresan, D. Moga, C. Lungoci. *Cytostatic Solution's Flow Control for a Hyperthermic Intraperitoneal Chemotherapy Device*, Applied Mechanics and Materials, vol. 811, 2015, pp. 359-364, Trans Tech Publications, Switzerland.
12. I. Clitan, D. Moga, C. Lungoci, I. A. Mironiuc, V. Muresan, and N. Stroia, *Design of a Temperature Controller for an Hyperthermic Intraperitoneal Chemotherapy Equipment*, in 2015 IEEE 10th Jubilee International Symposium on Applied Computational Intelligence and Informatics (SACI), pp. 49 – 54, May 21-23 2015 Timisoara. DOI:10.1109/SACI.2015.7208168
13. N. Stroia, D. Moga, Z. Barabas. *Web based monitoring of solar power systems*, 2nd IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Systems, May 22-24, 2013, pp. 131-136, Cluj-Napoca, Romania, DOI: 10.3182/20130522-3-RO-4035.00046.
14. S. Daraban, D. Petreus, D. Moga. *Novel Control for a Buck Converter Used in a DMPPT System*. 2nd IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Systems, vol. 2, pp. 125-130, 2013, DOI: 10.3182/20130522-3-RO-4035.00036.
15. N. Stroia, D. Moga, I. Kovacs, G. Mocanu, and M. Dobra. *Hydropower Structures Monitoring System with Hierarchically Distributed Smart Sensor Network*, 2nd IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Systems, May 22-24, 2013, pp. 37-41, Cluj-Napoca, Romania, DOI: 10.3182/20130522-3-RO-4035.00047.
16. R. Elz, D. Petreus, D. Moga, M. Abrudean, T. Patarau. *Fuzzy Digital Control for DC-DC Converters Used in Renewable Energy Systems*. 8th Power Plant & in IFAC Proceedings Volumes (IFAC PapersOnline), vol. 8, no. PART 1, pp. 91-96, 2012.
17. D. Moga, D. Petreus, N. Stroia. *A low cost architecture for remote control and monitoring of greenhouse fields*, 7th IEEE Conference on Industrial Electronics and Applications (ICIEA 2012), pp. 1940 – 1944, 2012, 18 -20 July 2012, Singapore, DOI: 10.1109/ICIEA.2012.6361046
18. R. Elz, T. Patarau, D. Petreus, S. Daraban, D. Moga. *Digital Control for Phase Shift Converter*. IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2012), pp. 62 – 67, 2012, DOI: 10.1109/AQTR.2012.6237676
19. R. Moga, F. Hrebenciuc, N. Stroia, D. Moga. *Optimal approximations for linearization of sensor transfer curves*, Automation, Computers, Applied Mathematics (ACAM) , 2012.
20. T. Patarau, D. Petreus, S.R. Daraban, R.A. Munteanu, D. Moga, A. Rusu. *Analysis and design of a bidirectional DC-DC converter with current doubler rectifier used in Smart Grid*, Electromotion, vol. 19, no. 1-2, pp. 56-63, 2012
21. R. Duma, P. Dobra, M. Trusca, D. Petreus and D. Moga. *Towards a Rapid Control Prototyping Toolbox for the Stellaris LM3S8000 Microcontrollers*, Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2, 2011
22. R. Munteanu, D. Moga, D. Petreus , N. Stroia, Z. Barabas, F. Hrebenciuc, *Diagnosis of Industrial Systems Driven by Electrical Machines with a Low Cost Platform*, 8th IEEE Symposium on Diagnostics for Electrical Machines, Power Electronics & Drives (SDEMPED'2011), Bologna, Italy
23. D. Moga, M. Dumitrean, N. Stroia, D. Petreus. *Remote Monitoring of Industrial Systems Health*. In 2nd IFAC Symposium on Telematics Applications, Volume Telematic Applications, 2010, ISBN: 978-3-902661-84-5
24. Trusca, M.; Lazea, G.; Farcas, A.; Dobra, P.; Moga, D., *Digital sliding mode control using low cost embedded solution*, IEEE International Conference on Automation Quality and Testing Robotics (AQTR), 2010, Cluj-Napoca, ISBN: 978-1-4244-6724-2
25. M.S. Munteanu, R. Balaban, D. Moga, M. Dumitrean, D. Rafiroiu and F. Neaga, *EKG Monitoring on the Mobile Phone using Bluetooth Transmission*, IFMBE Proceedings, International Conference on Advancements of Medicine and Health Care through Technology, 2009, Volume 26, 53-56, DOI: 10.1007/978-3-642-04292-8_12
26. P. Dobra, R. Duma, D. Moga, M.Trusca, *Digital control applications using TI digital signal controller*, WSEAS Transactions on Systems and Control Journal, Volume 3 Issue 6, June 2008
27. Nedevschi S., Pantille C., Marita T., Moga D., Dudea S., *Towards the Standardization of Ultrasound Elastography: a Complete Approach*, Automation Computers Applied Mathematics, Vol.17, No. 1, 2008
28. Moga D., Rusu .C, Dumitrean M., Moga R., Muresan A., *Low Cost Monitoring Architecture For Vibration Based Systems Health Management*, IFAC Workshop Convergence of Information Technologies and Control Methods With Power Plants and Power Systems- ICPS'07
29. Dobra P., Duma R., Moga D., Dobra M., *Adaptive System Identification of Automotive Power Generation*, IFAC Workshop Convergence of Information Technologies and Control Methods With Power Plants and Power Systems- ICPS'07
30. P. Dobra, M. Trusca, D. Moga, *Designing and Testing of Modern Tools for Control Systems Prototyping*, 16th IFAC World Congress, Prague, Czech Republic, July 2005

31. P. Dobra, M. Trusca, D. Moga, D. Petreus. *Stability Aspects in DC-DC Converters Using PID Controller*, Journal of Control Engineering and Applied Informatics, vol. 9 no. 1, pp. 33-40, 2007
32. R. M. Dumitrean, D. Moga, D. Petreus, N. Stroia, R.A. Munteanu., *Indirect measurement system for angular velocity*, Proceedings of 6th Electromotion Conference, 27-29 sept. 2005, Lausanne, Switzerland
33. L. Suci, R. Sumălan, D. Moga. *Integrated sensor-based monitoring system for pest and disease control in greenhouses*. Commun Agric Appl Biol Sci 2012;77(4):489-93
34. D. Moga, M. Munteanu, and R. A. Munteanu. *Integrated Environment for Calibrating Humidity Sensors*. Acta Electrotehnica, vol. 4(2), 2003.
35. Galatus R., Persa S., Moga D., Trifa V., et al. *Toward Abnormal Nuclei Detection Using an Integrated Automatic System*. Acta Electrotehnica, vol. 45(5) pp. 553 - 560, 2004.
36. R. Gălătuș, S. Persa, L. Neaga, T. Marita, D. Moga, M. Dumitrean, V. Trifa, *Method for Automated Screening of Cytological Slides*, Applied Medical Informatics, Vol. 15, No.3, 4 / 2004, Cluj-Napoca, pp. 73-79
37. L. Nagy-Kulcsar, P. Dobra, D. Moga, M. Dumitrean, N. Stroia, *Opportunities of Emerging Technologies for Smart Houses-City-wide Energy, Gas and Water Measurements Networks*, 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence, pp. 87-97, 25-26 May, 2006, Timișoara, Romania.
38. S. Nedevschi, T. Marita, M. Vaida, R. Danescu, D. Frențiu, F. Oniga, C. Pocol, D. Moga, *Camera Calibration Method for Stereo Measurements*, Journal of Control Engineering and Applied Informatics (CEAI), Vol.4, No. 2, pp.21-28, 2002, București, Romania.
39. P. Dobra, G. Lazea, D. Moga, and M. Trusca. *Robust Controller Design for Model Matching Problem*. Automation Computers Applied Mathematics, vol. 10(1 - 2) pp. 24 - 30, 2001.

Lucrări publicate în alte reviste

1. G. Mocanu, D. Moga, A. Marcu. "Determining Coefficients of the ov Model Using Matlab Simulation of Transversal Loop Oscillations with Random Elements", pp. 111-126, STUDIA UBB PHYSICA, LVI, 2, 2011
2. Munteanu R., Moga D., Dobra M., *Sistem de măsurare indirectă a masei, cu aplicații în industria alimentară*, Revista romana a inovării, ISSN1844-8356, vol 5, 2009
3. D. Moga, M. Munteanu, T. Marita, and C. Cret. *Mobile System for Testing and Calibrating Vehicle Speed Sensors*. International Journal of Electrical Engineering in Transportation, vol. 1(1) pp. 47 - 50, 2005

Lucrări publicate în volumele unor conferințe internaționale

1. N. Stroia, D. Moga, C. Lungoci, R. Moga, and D. Petreus. *Development of a hyperthermic intra-peritoneal chemotherapy equipment architecture based on the cyber-physical system paradigm*. In Ioan Dumitrache, Florin Filip, and Alexandru Dumitrascu, editors, Third International Workshop on Cyber Physical Systems (IWoCPS-3), Bucharest, Romania, 2014. Romanian Academy.
2. S. M. Dudea, S. Nedevschi, D. Dumitriu, C. Botar-Jid, D. Moga, T. Marița, C.D. Pantilie, *The electro-mechanical device for inducing controlled vibrations in ultrasound elastography: efficiency analysis through a phantom study*, Proceedings of the IEEE 4th International Conference on Intelligent Computer Communication and Processing, Workshop on Computers in Medical Diagnoses, 28 August 2008, Cluj-Napoca, Romania, ISBN978-973-662-399-8
3. R. Gălătuș, T. Marita, S. Persa, D. Moga, M. Dumitrean, V. Trifa, *Proposal for a Computerized Cytological Screening System*, in Proceedings of 6th International Carpathian Control Conference (ICCP 2005), 24-26 May 2005, Lillafured-Miskolc, Hungary, pp.443-448, ISBN 963-661-645-0. Co-organiser IEEE IAS Industrial Application Section Hungarian Chapter
4. D. Moga, F. Neaga, M.R. Dumitrean, P. Dobra, R.A. Munteanu, and V.Trifa - *A Versatile System For Home Rehabilitation Of Post-Surgery Patients*. Proc. of 3rd IFMBE European Conf., Prague 2005
5. D. Moga, D. Frențiu, V. Trifa, N. Stroia, T. Marița - *Low Cost Visual Servo System*. Proceedings of 6th Electromotion Conference, 27-29 sept. 2005, Lausanne - Switzerland
6. M. Dumitrean, D. Moga, et al. *USB based image acquisition system for real-time applications*. In *Proceedings of International Conference on Automation, Quality and Testing, Robotics*, vol. 2, pp. 195 - 200. Cluj-Napoca, Romania, May 13 - 15, 2004.
7. P. Dobra, F. Hurgoi, M. Dumitrean, D. Moga, and M. Trusca. *Development environment for controller design using HIL simulation*. In IEEE 8th International Conference on Intelligent Engineering Systems (INES 2004), Cluj-Napoca, September 19 - 21, 2004.
8. P. Dobra, D. Moga, R. Munteanu, and M. Munteanu. *Robust control of parallel converters*. In *Proceedings of the 5th International Symposium on Advanced Electromechanical Motion Systems*. Marrakesh, Morocco, November 26 - 28, 2003.
9. P. Dobra, D. Moga, R. Munteanu, and M. Munteanu. *Robust design controller for brushless DC motor based on the gain and phase margin*. In Proceedings of the 5th International Symposium on Advanced Electromechanical Motion Systems, pp. 590 - 593. Marrakesh, Morocco, November 26 - 28, 2003.
10. M. Munteanu, D. Moga, R. I. Munteanu, R. Ciupa, D. Rafiroiu, and M. Roman. *Interfacing Solutions for PC Based Medical Instruments*. In Proceedings of 2nd International Workshop on Advances in Numerical Computation Methods in Electromagnetism, Gent, Belgium, May 15 - 16, 2003.
11. P. Dobra, G. Lazea, and D. Moga. *Multiobjective robust control of controller for motion control of robot manipulators*. In *Proceedings of the 10th International Workshop on Robotics in Alpe-Adria-Danube Region*, Viena, Austria, May 16 - 18, 2001.

Lucrari publicate în volumele unor conferințe naționale

1. M.Munteanu, G. Chindriș, D.Moga, D. Rafiroiu, and R.A. Munteanu. *Posibilități de utilizare a instrumentației virtuale în filtrarea semnalelor medicale EKG*, Lucrările celui de-al VI-lea Congres național de farmacologie, terapeutică și toxicologie clinică, Cluj-Napoca, Iunie 2005, Editura medicală universitară "Iuliu Haiegeanu", ISBN 973-693-120-X
2. M. Munteanu, R. Ciupa, D. Moga, D. Rafiroiu, and M. Roman. *Telemedicine. Technical and economical evaluation*, October 9 - 11, 2003 MEDINF International Conference on Medical Informatics and Engineering, Craiova.
3. M.Munteanu, D.Moga, R. Ciupa, D. Rafiroiu, and M. Roman. *Conectarea dispozitivelor electronice medicale la PC folosind actualele porturi seriale de comunicații și tehnicile instrumentației virtuale*, Buletinul științific al Conferinței științifice cu participare internațională, Seria C, Vol. X, Baia Mare, Mai 2003