



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Mihai OPROESCU**  
Address(es) 110040 Pitesti Str. Targu din Vale, nr.1, Arges, Romania  
Telephone(s) +40 348 453 214 Mobile: +40726107142  
Fax(es) +40 348 453 201  
E-mail [moproescu@yahoo.com](mailto:moproescu@yahoo.com), [mihai.oproescu@upit.ro](mailto:mihai.oproescu@upit.ro)  
Nationality Romanian  
Date of birth 02.09.1974  
Gender Male

### Desired employment / Occupational field

**Electronics Engineering**

### Work experience

Dates	june.2003-october.2003
Occupation or position held	Control engineer
Main activities and responsibilities	Assisted three-dimensional control
Name and address of employer	Inginerie et Realisation Industrielle
Type of business or sector	Automobile production
Dates	October 2003 - present
Occupation or position held	Professor
Main activities and responsibilities	Research and education
Name and address of employer	University of Pitesti
Type of business or sector	University education

### Education and training

Dates	1989 - 1993
Title of qualification awarded	High School Diploma
Principal subjects/occupational skills covered	Education
Name and type of organisation providing education and training	College "Nicolae Balcescu" Pitesti

Dates 1998-2003  
 Title of qualification awarded Diplomat engineer  
 Principal subjects/occupational skills covered Education  
 Name and type of organisation providing education and training Faculty of Electronics and Electromechanics, University of Pitesti

Dates 2011  
 Title of qualification awarded PhD  
 Principal subjects/occupational skills covered Electrical Engineering  
 Name and type of organisation providing education and training Faculty of Electronics, Communication and Computer science, University of Pitesti

Dates 07.28.2002  
 Title of qualification awarded Cisco Networking Academy Program  
 Principal subjects/occupational skills covered Computer networks  
 Name and type of organisation providing education and training Cisco Networking Academy

**Personal skills and competences**

Mother tongue(s) **Romanian**  
 Other language(s)

Self-assessment  
 European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences I'm a sociable, communicative, reliable, conscientious, responsible and very creative person

Computer skills and competences Microsoft professional certificate

Driving licence B category

- Annexes**
- Experience (including management experience) in other programs / national projects / international projects**
  - List of papers**

1.



Experience (including management experience) in other programs / national projects / international projects

	Programs / Project	Function	Period:from ... to..
1	Grant CNCSIS nr 18/1.10.2007 : Modeling and optimal control of power flows in a power generation system using fuel cell	Manager	Sept.2007 –Dec. 2007
2	Intelligent control algorithms for the Energy Generation Systems, research grant of CNCSIS no. 570/2006, 2006-2008. <a href="http://194.102.64.7/GranturiFinalizate/faces/Projects/ProjectDetails.jsp">http://194.102.64.7/GranturiFinalizate/faces/Projects/ProjectDetails.jsp</a>	Member, responsible economic	2006 - 2008
3	Integrated Energy Generation Systems using renewable sources beneficiary: AMCSIT, contractor: Institutul National de Cercetare-Dezvoltare pentru Tehnologii Criogenice si Izotopice - ICSI Rm. Valcea, CEEX no. 2354/2006, 2006-2008 (consortium; manager of research team for University of Pitesti: <a href="http://www.upit.ro">www.upit.ro</a> CEEX226; coordinated by ICSI Rm. Valcea <a href="http://www.icsi.ro/proiecte/ceex226/info.html">http://www.icsi.ro/proiecte/ceex226/info.html</a> ).	Member, responsible economic	2006 – 2008
4	Polymer composite films as a means of electromagnetic shielding in the microwave field, beneficiary MEC- PNCDI – MATNANTECH, 2006-2008 (consortium)	Member	2006-2008
5	Technology-based nanostructured materials for electrochemical double layer capacitors used to store electricity - Supercapacitors, beneficiary MEC- PNCDI - AMCSIT, 2006-2008 (consortium)	Member	2006-2008
6	Nr. X2C32 tema <i>Sistem mecanic pentru cuplarea surselor de putere termica si electrica, destinat automobilelor ecologice cu propulsie hibrida</i> , MEC – PNCDI	Member	2006-2008
7	Computer system design, simulation, testing and configuring smart renewable energy power systems, PNCD II 4 Parteneriate PC nr. 22140/25.09.2008 : beneficiary: AMCSIT, contractor: <b>Universitatea Politehnica din Bucuresti, 2008-2010;</b>	Member	2008-2010
8	Intelligente locomotion prosthesis, PNCD II 4 Parteneriate PC 1379 : beneficiary: AMCSIT, contractor: <b>Universitatea Politehnica din Bucuresti, 2007-2010</b>	Member	2007-2009
9	Theoretical and experimental demonstrations of electric and hybrid propulsion systems to develop competitive and sustainable transport systems, MEC- PNCDI- AMTRANS, CEEX no. 5558 X2C31, 2006-2008 (consortium).	Member	2006-2008

2.

# LIST OF PAPERS

**b1) Books and chapters in books publishes in International Publishing House (0 in the last five years)**

**b2) Books publishes in Publishing House recognized by CNCISIS\***

\*CNCISIS (National Council of Scientific Research in Higher Education)

**b21) In English language**

1. **M. Oproescu, 2010, 2 chapters in N. Bizon (Ed.), 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, Publishing house of the University of Pitești, Pitești, ISBN 978-606-560-128-4 (hardcover), ISBN 978-606-560-129-1 (e-book).**

**In Romanian language:**

**b22) Books on research area**

1. **N. Bizon, M. Oproescu, 2007, Power Converters for Energy Generation Systems (Convertoare de Putere utilizate in Sistemele de Generare a Energiei), 160 pages, Publishing house of the University of Pitești, Pitești, ISBN 978-973-690-644-2.**

**b23) Books for students**

**c) Articles / Studies published in journals**

**c1) Papers in ISI Journals**

1. N. Bizon, E. Sofron, M. Raducu, M. Oproescu, 2010, Nonlinear Control for a Buck switching power supplies using opto-couplers in feedback loop, Optoelectronics and Advanced Materials - Rapid Communications 4(6), pp. 788 - 794 : <http://inoe.inoe.ro/oam-rc/index.php>

**c2) Papers in indexed Journals**

**c3) Papers in Journals (indexed by \*CNCISIS as +B & B)**

\*CNCISIS (National Council of Scientific Research in Higher Education)

1. M. Oproescu, N. Bizon, 2010, On Implementation of an Emulator for the Photovoltaic Panel, University of Pitesti Scientific Bulletin, Series: "Electronics and Computer Science", ISSN-1453-1119 (B+), 10(2) <http://www.orar.upit.ro/DocManagerPub/PublicSite/Main.aspx>
2. N. Bizon, E. Sofron, M. Oproescu, 2009, Filtering Techniques of the Inverter Input Current Ripple, University of Pitesti Scientific Bulletin, Series: "Electronics and Computer Science", ISSN-1453-1119 (B+), 9(1), pp. 74-79 <http://www.orar.upit.ro/DocManagerPub/PublicSite/Main.aspx>

**d) Articles / Studies published in conferences**

**d1) Articles / Studies published in ISI Web of Knowledge**

1. N. Bizon, G. Iana, M. Oproescu, Fuzzy Interpolation of the Average Signal Steps, International Symposium on Signals, Circuits and Systems (ISSCS 2009), Iasi, Romania, ISBN: 978-1-4244-3785-6, pp. 1-4, INSPEC: 10835486 (IEEEExplore), [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?isnumber=5206080&arnumber=5206099&count=145&index=54](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?isnumber=5206080&arnumber=5206099&count=145&index=54)
2. N. Bizon, M. Oproescu, M. Raducu, **Fuzzy bang-bang control of a switching voltage regulator**, 16<sup>th</sup> IEEE International Conference on Automation, Quality and Testing, Robotics - AQTR 2008. Vol. 2, pp. 192-197, ISBN: 978-1-4244-2576-1, INSPEC Accession Number: 10207806, IEEE Catalog Number CFP0834A-CDR 10.1109/AQTR.2008.4588819 (IEEEExplore) [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4588819](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4588819)
3. N. Bizon, M. Raducu, M. Oproescu, Fuel cell current ripple minimization using a bi-buck power interface, 13th International Power Electronics and Motion Control Conference 2008, pp. 636-643, ISBN 978-1-4244-1742-1, IEEE Catalog Number CFP0834A-CDR (IEEEExplore), [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4635334](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4635334)
4. N. Bizon, E. Sofron, M. Oproescu, 2007, Intelligent Control of the Power Flows on an Energy Generation System, The 11<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics - WMSCI2007, vol. 5, pp. 314-319, ed. by International Institute of Informatics and Systemics (IIS), Orlando, Florida, USA, ISBN 980-07-7559-5 (<http://www.iis-cyber.org/wmsci2007>).
5. N. Bizon, M. Oproescu, 2007, Energy Generation System Behaviour using a Clocked Fuzzy Peak Current Control, Proceedings of the 12th European Conference on Power Electronics and Applications, EPE 2007, pp 1-9, ed. by the European Power Electronics Association & university of Aalborg, Denmark, ISBN 9789075815108, INSPEC Accession Number: 9852419, IEEE Catalog Number 07EX1656C 10.1109/EPE.2007.4417380 (IEEEExplore) [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4417380](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4417380)

**d2) Papers in indexed Data Base (also reconaized by \*CNCISIS)**

\*CNCISIS (National Council of Scientific Research in Higher Education)

1. N. Bizon, E. Lefter, M. Oproescu, Modeling and Control of the Energy Sources Power Interface for Automotive Hybrid Electrical System, 2007, Proceedings of the 21st JUMV International Automotive Conference SCIENCE AND MOTOR VEHICLES 2007, proceedings on CD, Paper NMV0752 - Pages 12, [http://riedal-dz.com/resources/52\\_bizon.pdf](http://riedal-dz.com/resources/52_bizon.pdf), ed. by the Society of Automotive Engineers of Serbia under FISITA patronage, Belgrade, [http://www.fisita.com/publications/papers?keywords=Bizon&event=0000446DAB7D.538A82AE.000050F6.0008&category=&g\\_o=search&x=32&y=10](http://www.fisita.com/publications/papers?keywords=Bizon&event=0000446DAB7D.538A82AE.000050F6.0008&category=&g_o=search&x=32&y=10)

**d3) Papers in Proceedings of Conferences/Symposiums**

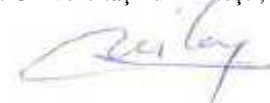
**d31) in other countries**



1. N. Bizon, M. Oproescu, Fuzzy Average Method for Extraction of Signal Drown in Noise, Fourth International Conference on Intelligent Computing and Information Systems (ICICIS 2009), pp. 233-238, ISBN : 977-237-172-3, ISSN :1687-1103, CAIRO, EGYPT, March 19-22, 2009.
2. N. Bizon, M. Oproescu, Modelling the Bi-Buck Interface for Inverter Current Ripple Compensation, Proceedings of Int. conf. Technologies and Power Electronics (TPE09), No. 1, pp. 273-277, University of Basque Country, 3-5 Sept. 2009, Bilbao, Spain, ISBN 978-84-937328-1-3 ([www.ictpe.com/TPE-2009](http://www.ictpe.com/TPE-2009))
3. N. Bizon, M. Oproescu, Control Performances of the Bi-Buck Interface used for Inverter Current Ripple Compensation, Proceedings of Int. conf. Technologies and Power Electronics (TPE09), No. 1, pp. 278-282, University of Basque Country, 3-5 Sept. 2009, Bilbao, Spain, ISBN 978-84-937328-1-3 ([www.ictpe.com/TPE-2009](http://www.ictpe.com/TPE-2009))
4. N. Bizon, E. Sofron, M. Oproescu, M. Raducu, Low Frequency PEMFC Current Ripple Compensation using a Bang-Bang Controller for Buck Current Source, Proceedings of Int. conf. Technologies and Power Electronics (TPE08), pp. II 121- 125, (<http://www.ictpe.com/TPE-2008/DetailedProgram.pdf>).
5. N. Bizon, E. Sofron, , M. Raducu, M. Oproescu, Low Frequency PEMFC Current Ripple Compensation using a Controlled Buck Current Source, Proceedings of Int. conf. Technologies and Power Electronics (TPE08), pp. II 987-1001, (<http://www.ictpe.com/TPE-2008/DetailedProgram.pdf>).
6. N. Bizon, E. Sofron, I. Tutanescu, M. Oproescu, 2006, Power factor corection using a bi-boost converter for ouput power flow, Proceedings of Int. conf. Technologies and Power Electronics (TPE06), pp. 436-444, Turcia, ISBN (<http://www.ictpe.com/TPE-2006/DetailedProgram.pdf>).

#### d31) in country

1. M. Oproescu, Bizon Nicu, E. Sofron, Efficiency of Current Ripple Passive Filtering Techniques for Inverter System Supplied by A Fuel Cell - Modeling and Simulations, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.2, pp. 61-66, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
2. M. Oproescu, Bizon Nicu, E. Sofron, Efficiency of Current Ripple Passive Filtering Techniques for Inverter System Supplied by A Fuel Cell - Experimental Results, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.5, pp. 67-74, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
3. Zafiu, V. Ionescu, N. Bizon, C. Ghita, M. Oproescu, A Detailed Model for PV Simulation and MPP Tracking with Tree Points, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.1, pp. 148-154, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
4. N. Bizon, E. Sofron, M. Oproescu, M. Raducu, 2007, Multi-stage Inverter Topologies for an Energy Generation Systems, 13th International Symposium on Modeling, Simulation and System's Identification SIMSIS 2007, September 21-22, 2007, Galati, Romania (<http://www.simsis.ugal.ro/simsis13>).
5. N. Bizon, M. Oproescu, Some Aspect Concerning the Fuel Cell Current Ripple as Interaction With An Inverter System, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 122-132, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
6. Nicu Bizon, Ionescu Laurentiu, Alin Mazare, Mihai Oproescu, Analyze of the Feed-Forward Control for a Pure Sine Inverter, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 71-79, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
7. Nicu Bizon, Mihai Oproescu, Ionescu Laurentiu, Alin Mazare, Ultracapacitors Tester with PC Interface, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 133-146, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
8. Nicu Bizon, Alin Mazare, Ionescu Laurentiu, Mihai Oproescu, Marian Raducu, Some Designing Aspects of 1kw Inverter System: DC- DC Converter, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 147-156, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
9. Nicu Bizon, Ionescu Laurentiu, Alin Mazare, Mihai Oproescu, Marian Raducu, Some Designing Aspects of 1kW Inverter System: DC- AC Converter, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 157-169, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
10. N.Bizon, M. Oproescu, 2007, Feed-Forward Control of the PWM Sine Inverter, The First European Conference H2\_Fuel\_Cells\_Millennium \_ Convergence, Bucharest, CD and volume proceeding, IPA Publishing House, ECAS Trade SRL, pp., ISBN (10) 973-88046-7-1, ISBN (13) 978-973-88046-7-8.
11. N. Bizon, E. Sofron, M. Oproescu, 2006, An Investigations into the Fast- and Slow – Scale Instabilities of an Energy Generation System with a Fuzzy Hysteretic Control, Advances in Intelligent Systems and Technologies journal & Proceedings of European Conference on Intelligent Systems and Technologies (ECIT2006 – 4th), pp. 19-36, ed. Performantica, Iasi, ISSN (<http://www.etc.tuiasi.ro/sibm/ECIT2006/>).
12. N. Bizon, M. Oproescu, 2006, Control of the Inverter used into Energy Generation System, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 169-172, ed. by ICSI, Ramnicu Valcea, ISBN.
13. N. Bizon, M. Oproescu, 2006, Control of the DC-DC Converter used into Energy Generation System, Int. conf. Progress in cryogenics and isotopes separation, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 173-177, ed. by ICSI, Ramnicu Valcea, ISBN.
14. N. Bizon, M. Oproescu, 2006, Modeling and Control of the PEMFC Power Interface, Int. conf. Progress in cryogenics and isotopes separation, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 155-168, ed. by ICSI, Ramnicu Valcea, ISBN.
15. N. Bizon, E. Sofron, M. Oproescu, 2006, Unity power factor correction using the bi-boost topology with a forward control technique, Proceedings of Int. conf. on Development and Applications Systems (DAS'06), pp. 107-113, Suceava, ISBN.
16. N. Bizon, M. Oproescu, 2006, Cycloconverter Operation in the low-cost Energy Generation Systems, Buletin științific al Universității din Pitești, seria “Electronica și știința calculatoarelor” număr special 1 / 2006, pp., Editura Universității din Pitești, Pitesti, ISSN 1453–119.



17. N. Bizon, E. Sofron, M. Oproescu, 2006, Power Factor Correction using a Mixed Control Technique, Proceedings of .Int. Symposium on Electrical and Electronics Engineering ISEEE06, pp. 36-39, ed. by University "Dunarea de Jos", Galati, ISBN.
18. N. Bizon, E. Sofron, M. Raducu, M. Oproescu, 2006, Wear estimation of a brush with incorporated bearing through the lubricant pressure spectrum analysis, Proceedings of .Int. Symposium on Electrical and Electronics Engineering ISEEE06, pp. 187-192, ed. by University "Dunarea de Jos", Galati, ISBN..
19. N. Bizon, M. Oproescu 2005, Hysteretic Fuzzy Control of The Boost Converter, ECAI 2005 INTERNATIONAL CONFERENCE First Edition Electronics, Computers and Artificial Intelligence - ECAI'05, S2 1-10, Editura Universității din Pitești, Pitești, ISSN 1453–119 (<http://www.ecai.upit.ro>).
20. N. Bizon, M. Oproescu 2005, Clocked hysteretic fuzzy control of the boost converter, ECAI 2005 INTERNATIONAL CONFERENCE First Edition Electronics, Computers and Artificial Intelligence - ECAI'05, S2 11-19, Editura Universității din Pitești, Pitești, ISSN 1453–119 (<http://www.ecai.upit.ro>).
21. Nicu Bizon, Emilian Lefter, Mihai Oproescu, 2005, Some Aspects of the Alternator Efficiency Improvement using Power Converters , International Conference for Road Vehicles CAR2005, proceedings on CD, ed. by the Society of Automotive Engineers of Romania (SIAR) under FISITA patronage, Pitesti, ISSN (<http://www.fisita.com/publications/papers>).
22. Nicu Bizon, Emil Sofron, Mihai Oproescu, 2005, Some Aspects of PEMFC – Battery Interface Simulation in Automotive Applications, Proceedings of the International Conference for Road Vehicles CAR2005, proceedings on CD, ed. by the Society of Automotive Engineers of Romania (SIAR) under FISITA patronage, Pitesti ISSN (<http://www.fisita.com/publications/papers>).
23. N. Bizon, A. Zafiu, M. Oproescu, 2005, PEMFC modeling using a genetics algorithm for parameters tuning, Int. Conference ISEE 2005, Editura Universității din Targoviste, Targoviste, 2005.

#### e) Patents

##### g) Other work and scientific contributions

###### g1) Papers in Journals of the Romanian Academy

1. N. Bizon, M. Oproescu, 2004, Hysteretic Fuzzy Control of the Power Interface Converter, “Fuzzy Systems and AI” journal - Reports and Letters, Vol. 10, No. 3, pp. 139-158, ed. by Romanian Academy, Publishing House of the Romanian Academy (Editors: H.N. Teodorescu s.a.), ISSN 1016-2127 (<http://www.ear.ro/3brevist/rv83/rv83.htm>)
2. N. Bizon, R. Radian, 2002, VLSI Implementation of the Fuzzy Image Filtering, “Fuzzy Systems and AI” journal - Reports and Letters, Vol. 8, No. 1-3, pp. 41-48, Romanian Academy, Publishing House of the Romanian Academy (Editors: H.N. Teodorescu s.a.), ISSN 1016-2127 (<http://www.ear.ro/3brevist/rv83/rv83.htm>)

###### g2) Papers in international Journals

1. Bizon Nicu, M. Oproescu, Modelling the Bi-Buck Interface for Inverter Current Ripple Compensation, International Journals on Technical and Physical Problems of Engineering (IJTPE, ISSN 2077-3528), TPEJournal-Autumn2009 1(1) 32-37, [www.iotpe.com/TPE-Journal/.../IJTPE-Dec2009-No1-Vol1-Pg32-37.pdf](http://www.iotpe.com/TPE-Journal/.../IJTPE-Dec2009-No1-Vol1-Pg32-37.pdf)  
Bizon Nicu, M. Oproescu, Control Performances of the Bi-Buck Interface used for Inverter Current Ripple Compensation, International Journals on Technical and Physical Problems of Engineering (IJTPE, ISSN 2077-3528), 1(1) 2010, 5-10, <http://www.iotpe.com/TPE-Journal/IJTPE-2010/IJTPE-Mar2010-No1-Vol1/IJTPE-Mar2010-No1-Vol1-Pg5-10.pdf>



## Lista de lucrari

1<sup>o</sup> PhD thesis:

**T1. Mihai OPROESCU**, *Modelarea și optimizarea fluxurilor de putere din sisteme invertor alimentate de la pile de combustie*, 2011.

2<sup>o</sup> Books and chapters in books publishes in International Publishing House.

**Ca1.** N. Bizon, **M. Oproescu**, 2007, **Power Converters for Energy Generation Systems (Convertoare de Putere utilizate in Sistemele de Generare a Energiei)**, 160 pag, Editura Universității din Pitești, Pitești, ISBN 978-973-690-644-2.

**Cb1.** **M. Oproescu**, 2010, 2 chapters in N. Bizon (Ed.), *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*, Publishing house of the University of Pitești, Pitești, ISBN 978-606-560-128-4 (hardcover), ISBN 978-606-560-129-1 (e-book).

3<sup>o</sup> Papers in ISI Journals and Papers in Journals (indexed):

**Risi1.** N. Bizon, **M. Oproescu**, 2007, *Energy Generation System Behaviour using a Clocked Fuzzy Peak Current Control*, Proceedings of the 12th European Conference on Power Electronics and Applications, EPE 2007, pp 1-9, ed. by the European Power Electronics Association & university of Aalborg, Denmark, ISBN 9789075815108, INSPEC Accession Number: 9852419, IEEE Catalog Number 07EX1656C 10.1109/EPE.2007.4417380 ([IEEEExplore](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4417380))  
[http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4417380](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4417380)

**Risi2.** N. Bizon, E. Sofron, **M. Oproescu**, 2007, *Intelligent Control of the Power Flows on an Energy Generation System*, The 11<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics – WMSCI2007, vol. 5, pp. 314-319, ed. by International Institute of Informatics and Systemics (IIS), Orlando, Florida, USA, ISBN 980-07-7559-5 (<http://www.iis-cyber.org/wmsci2007>)

**Risi3.** N. Bizon, **M. Oproescu**, M. Raducu, *Fuzzy bang-bang control of a switching voltage regulator*, 16<sup>th</sup> IEEE International Conference on Automation, Quality and Testing, Robotics - AQTR 2008. Vol. 2, pp. 192-197, ISBN: 978-1-4244-2576-1, INSPEC Accession Number: 10207806, IEEE Catalog Number CFP0834A-CDR 10.1109/AQTR.2008.4588819 ([IEEEExplore](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4588819))  
[http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4588819](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4588819)

**Risi4.** N. Bizon, M. Raducu, **M. Oproescu**, *Fuel cell current ripple minimization using a bi-buck power interface*, 13th International Power Electronics and Motion Control Conference 2008, pp. 636-643, ISBN 978-1-4244-1742-1, IEEE Catalog Number CFP0834A-CDR ([IEEEExplore](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4635334)),  
[http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=4635334](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4635334)

**Risi5.** N. Bizon, E. Sofron, M. Raducu, **M. Oproescu**, 2010, *Nonlinear Control for a Buck switching power supplies using opto-couplers in feedback loop*, Optoelectronics and Advanced Materials - Rapid Communications 4(6), pp. 788 - 794 : <http://inoe.inoe.ro/oam-rc/index.php>

Rsi1. N. Bizon, **M. Oproescu**, 2004, *Hysteretic Fuzzy Control of the Power Interface Converter*, "Fuzzy Systems and AI" journal - Reports and Letters, Vol. 10, No. 3, pp. 139-158, ed. by Romanian Academy, Publishing House of the Romanian Academy (Editors: H.N. Teodorescu s.a.), ISSN 1016-2127 (<http://www.ear.ro/3brevist/rv83/rv83.htm>)

Rsi2. N. Bizon, **M. Oproescu**, 2006, *Cycloconverter Operation in the low-cost Energy Generation Systems*, Buletin științific al Universității din Pitești, seria "Electronica și știința calculatoarelor" număr special 1 / 2006, pp., Editura Universității din Pitești, Pitesti, ISSN 1453–119.

**Rsi3.** Bizon Nicu, **M. Oproescu**, *Modelling the Bi-Buck Interface for Inverter Current Ripple Compensation*, International Journals on Technical and Physical Problems of Engineering (IJTPE, ISSN 2077-3528), TPEJournal-Autumn 2009 1(1) 32-37, [www.iotpe.com/TPE-Journal/.../IJTPE-Dec2009-No1-Vol1-Pg32-37.pdf](http://www.iotpe.com/TPE-Journal/.../IJTPE-Dec2009-No1-Vol1-Pg32-37.pdf)

**Rsi4.** N. Bizon, E. Sofron, **M. Oproescu**, 2009, *Filtering Techniques of the Inverter Input Current Ripple*, University of Pitesti Scientific Bulletin, Series: "Electronics and Computer Science", ISSN-1453-1119 (B+), 9(1), pp. 74-79

**Rsi5.** Bizon Nicu, **M. Oproescu**, *Control Performances of the Bi-Buck Interface used for Inverter Current Ripple Compensation*, International Journals on Technical and Physical Problems of Engineering (IJTPE, ISSN 2077-3528), 1(1) 2010, 5-10, <http://www.iotpe.com/TPE-Journal/IJTPE-2010/IJTPE-Mar2010-No1-Vol1/IJTPE-Mar2010-No1-Vol1-Pg5-10.pdf>

**Rsi6.** **M. Oproescu**, N. Bizon, 2010, *On Implementation of an Emulator for the Photovoltaic Panel*, University of Pitesti Scientific Bulletin, Series: "Electronics and Computer Science", ISSN-1453-1119 (B+), 10(2)

4<sup>0</sup> Articles / Studies published in conferences.

**Vi1.** N. Bizon, **M. Oproescu**, 2005, *Hysteretic Fuzzy Control of The Boost Converter*, ECAI 2005 INTERNATIONAL CONFERENCE First Edition Electronics, Computers and Artificial Intelligence - ECAI'05, S2 1-10, Editura Universității din Pitești, Pitești, ISSN 1453–119 (<http://www.ecai.upit.ro>).

**Vi2.** N. Bizon, **M. Oproescu**, 2005, *Clocked hysteretic fuzzy control of the boost converter*, ECAI 2005 INTERNATIONAL CONFERENCE First Edition Electronics, Computers and Artificial Intelligence - ECAI'05, S2 11-19, Editura Universității din Pitești, Pitești, ISSN 1453–119 (<http://www.ecai.upit.ro>)

**Vi3.** Nicu Bizon, Emilian Lefter, **M. Oproescu**, 2005, *Some Aspects of the Alternator Efficiency Improvement using Power Converters*, International Conference for Road Vehicles CAR2005, proceedings on CD, ed. by the Society of Automotive Engineers of Romania (SIAR) under FISITA patronage, Pitesti, ISSN (<http://www.fisita.com/publications/papers>).

**Vi4.** Nicu Bizon, Emil Sofron, **M. Oproescu**, 2005, *Some Aspects of PEMFC – Battery Interface Simulation in Automotive Applications*, Proceedings of the International Conference for Road Vehicles CAR2005, proceedings on CD, ed. by the Society of Automotive Engineers of Romania (SIAR) under FISITA patronage, Pitesti ISSN (<http://www.fisita.com/publications/papers>).

**Vi5.** N. Bizon, A. Zafiu, **M. Oproescu**, 2005, *PEMFC modelling using a genetics algorithm for parameters tuning*, Int. Conference ISEE 2005, Editura Universității din Targoviste, Targoviste, 2005.

**Vi6.** N. Bizon, E. Sofron, I. Tutanescu, **M. Oproescu**, 2006, *Power factor correction using a bi-boost converter for output power flow*, Proceedings of Int. conf. Technologies and Power Electronics (TPE06), pp. 436-444, Turcia, ISBN (<http://www.ictpe.com/TPE-2006/DetailedProgram.pdf>).

**Vi7.** N. Bizon, E. Sofron, **M. Oproescu**, 2006, *An Investigations into the Fast- and Slow – Scale Instabilities of an Energy Generation System with a Fuzzy Hysteretic Control*, Advances in Intelligent Systems and Technologies journal & Proceedings of European



Conference on Intelligent Systems and Technologies (ECIT2006 – 4th), pp. 19-36, ed. Performantica, Iasi, ISSN (<http://www.etc.tuiasi.ro/sibm/ECIT2006/>).

- Vi8.** N. Bizon, **M. Oproescu**, 2006, *Control of the Inverter used into Energy Generation System*, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 169-172, ed. by ICSI, Ramnicu Valcea,
- Vi9.** N. Bizon, **M. Oproescu**, 2006, *Control of the DC-DC Converter used into Energy Generation System*, Int. conf. Progress in cryogenics and isotopes separation, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 173-177, ed. by ICSI, Ramnicu Valcea
- Vi10.** N. Bizon, **M. Oproescu**, 2006, *Modeling and Control of the PEMFC Power Interface*, Int. conf. Progress in cryogenics and isotopes separation, Proceedings of Int. conf. Progress in cryogenics and isotopes separation, pp. 155-168, ed. by ICSI, Ramnicu Valcea
- Vi11.** N. Bizon, E. Sofron, **M. Oproescu**, 2006, *Unity power factor correction using the bi-boost topology with a forward control technique*, Proceedings of Int. conf. on Development and Applications Systems (DAS'06), pp. 107-113, Suceava, ISBN.
- Vi12.** N. Bizon, E. Sofron, **M. Oproescu**, 2006, *Power Factor Correction using a Mixed Control Technique*, Proceedings of .Int. Symposium on Electrical and Electronics Engineering ISEEE06, pp. 36-39, ed. by University "Dunarea de Jos", Galati
- Vi13.** N. Bizon, E. Sofron, M. Raducu, **M. Oproescu**, 2006, *Wear estimation of a brush with incorporayed bearing through the lubricant pressure spectrum analysis*, Proceedings of .Int. Symposium on Electrical and Electronics Engineering ISEEE06, pp. 187-192, ed. by University "Dunarea de Jos", Galati
- Vi14.** N. Bizon, E. Sofron, **M. Oproescu**, M. Raducu, 2007, *Multi-stage Inverter Topologies for an Energy Generation Systems*, 13th International Symposium on Modeling, Simulation and System's Identification SIMSIS 2007, September 21-22, 2007, Galati, Romania (<http://www.simsis.ugal.ro/simsis13>).
- Vi15.** N. Bizon, **M. Oproescu**, *Some Aspect Concerning the Fuel Cell Current Ripple as Interaction With An Inverter System*, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 122-132, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
- Vi16.** Nicu Bizon, Ionescu Laurentiu, Alin Mazare, **M. Oproescu**, *Analyze of the Feed-Forward Control for a Pure Sine Inverter*, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 71-79, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
- Vi17.** Nicu Bizon, **M. Oproescu**, Ionescu Laurentiu, Alin Mazare, *Ultracapacitors Tester with PC Interface*, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 133-146, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
- Vi18.** Nicu Bizon, Alin Mazare, Ionescu Laurentiu, **M. Oproescu**, Marian Raducu, *Some Designing Aspects of 1kw Inverter System: DC- DC Converter*, International Conference Second Edition - Electronics, Computers and Artificial Intelligence - ECAI'07, nr. 2/2007, pp. 147-156, Pitești, ISSN 1843–2115, 2007 (<http://www.ecai.upit.ro>).
- Vi19.** N.Bizon, **M. Oproescu**, 2007, *Feed-Forward Control of the PWM Sine Inverter*, The First European Conference H2\_Fuel\_Cells\_Millennium \_ Convergence, Bucharest,

CD and volume proceeding, IPA Publishing House, ECAS Trade SRL, pp., ISBN (10) 973-88046-7-1, ISBN (13) 978-973-88046-7-8.

- Vi20.** N. Bizon, E. Lefter, **M. Oproescu**, *Modeling and Control of the Energy Sources Power Interface for Automotive Hybrid Electrical System*, 2007, Proceedings of the 21st JUMV International Automotive Conference SCIENCE AND MOTOR VEHICLES 2007, proceedings on CD, Paper NMV0752 – Pages 12, [http://riedal-dz.com/resources/52\\_bizon.pdf](http://riedal-dz.com/resources/52_bizon.pdf), ed. by the Society of Automotive Engineers of Serbia under FISITA patronage, Belgrade, <http://www.fisita.com/publications/papers?keywords=Bizon&event=0000446DAB7D.538A82AE.000050F6.0008&category=&go=search&x=32&y=10>
- Vi21.** N. Bizon, E. Sofron, **M. Oproescu**, M. Raducu, *Low Frequency PEMFC Current Ripple Compensation using a Bang-Bang Controller for Buck Current Source*, Proceedings of Int. conf. Technologies and Power Electronics (TPE08), pp. II 121- 125, (<http://www.ictpe.com/TPE-2008/DetailedProgram.pdf>).
- Vi22.** N. Bizon, E. Sofron, , M. Raducu, **M. Oproescu**, *Low Frequency PEMFC Current Ripple Compensation using a Controlled Buck Current Source*, Proceedings of Int. conf. Technologies and Power Electronics (TPE08), pp. II 987-1001, (<http://www.ictpe.com/TPE-2008/DetailedProgram.pdf>).
- Vi23.** N. Bizon, G. Iana, **M. Oproescu**, *Fuzzy Interpolation of the Average Signal Steps*, International Symposium on Signals, Circuits and Systems (ISSCS 2009), Iasi, Romania, ISBN: 978-1-4244-3785-6, pp. 1-4, INSPEC: 10835486 ([IEEEExplore](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?isnumber=5206080&arnumber=5206099&count=145&index=54)), [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?isnumber=5206080&arnumber=5206099&count=145&index=54](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?isnumber=5206080&arnumber=5206099&count=145&index=54)
- Vi24.** **M. Oproescu**, Bizon Nicu, E. Sofron, *Efficiency of Current Ripple Passive Filtering Techniques for Inverter System Supplied by A Fuel Cell - Modeling and Simulations*, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.2, pp. 61-66, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
- Vi25.** **M. Oproescu**, Bizon Nicu, E. Sofron, *Efficiency of Current Ripple Passive Filtering Techniques for Inverter System Supplied by A Fuel Cell - Experimental Results*, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.5, pp. 67-74, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
- Vi26.** Zafiu, V. Ionescu, N. Bizon, C. Ghita, **M. Oproescu**, *A Detailed Model for PV Simulation and MPP Tracking with Tree Points*, Proceedings of Int. conf on Electronics, Computers and Artificial Intelligence - ECAI'09, No.1, pp. 148-154, Pitești, ISSN 1843–2115 (<http://www.ecai.upit.ro>).
- Vi27.** N. Bizon, **M. Oproescu**, *Fuzzy Average Method for Extraction of Signal Drown in Noise*, Fourth International Conference on Intelligent Computing and Information Systems (ICICIS 2009), pp. 233-238, ISBN : 977-237-172-3, ISSN :1687-1103, CAIRO, EGYPT, March 19-22, 2009.
- Vi28.** N. Bizon, **M. Oproescu**, *Modelling the Bi-Buck Interface for Inverter Current Ripple Compensation*, Proceedings of Int. conf. Technologies and Power Electronics (TPE09), No. 1, pp. 273-277, University of Basque Country, 3-5 Sept. 2009, Bilbao, Spain, ISBN 978-84-937328-1-3 ([www.ictpe.com/TPE-2009](http://www.ictpe.com/TPE-2009))
- Vi29.** N. Bizon, **M. Oproescu**, *Control Performances of the Bi-Buck Interface used for Inverter Current Ripple Compensation*, Proceedings of Int. conf. Technologies and Power Electronics (TPE09), No. 1, pp. 278-282, University of Basque Country, 3-5 Sept. 2009, Bilbao, Spain, ISBN 978-84-937328-1-3 ([www.ictpe.com/TPE-2009](http://www.ictpe.com/TPE-2009))

- Vi30.** N. Bizon, E. Sofron, **M. Oproescu**, *Low Frequency Ripple Mitigation of the Fuel Cell Inverter System using a Controlled Buck Current Source – Part II: Nonlinear Control*, Advances in Intelligent Systems and Technologies - ECIT2010 paper has been published in the ECIT2010 CD proceeding of the 6<sup>th</sup> European Conference on Intelligent Systems and Technologies  
([http://www.iit.tuiasi.ro/ecit2010/documents/Program\\_ECIT\\_2010\\_FINAL.pdf](http://www.iit.tuiasi.ro/ecit2010/documents/Program_ECIT_2010_FINAL.pdf))
- Vi31.** N. Bizon, **M. Oproescu**, *Multiport Power Converters Used in Plug-in Fuel Cell Vehicles – State of the Art*, International Conference Electronics, Computers and Artificial Intelligence ECAI 2011 proceeding, ISSN 1843–2115
- Vi32.** N. Bizon, **M. Oproescu**, *Multiport Power Converters Used in Plug-in Fuel Cell Vehicles – Energy efficiency*, International Conference Electronics, Computers and Artificial Intelligence ECAI 2011 proceeding, ISSN 1843–2115
- Vi33.** A.Zafiu, Gh. Nistor, **M. Oproescu**, *Optimized anemometer for array detection*, International Conference Electronics, Computers and Artificial Intelligence ECAI 2011 proceeding, ISSN 1843–2115

*Manager of the research team* „**Modélisation et la simulation des flux de puissance des systèmes inverter alimenté par des piles à combustible (CNCSIS-MD 7/2008)**”

*Member in the research team*

Pn2. **Mihai Oproescu**, membru si responsabil economic, Grant CNCSIS nr. 570 : Algoritmi inteligenti pentru controlul eficient al unui sistem inverter alimentat de la o pila de combustie, 2006-2008, director de proiect Nicu Bizon;

Pn3. **Mihai Oproescu**, membru si responsabil economic, Grant MEC nr. 226/2006 Sistem integrat de conversie a energiei din surse regenerabile; beneficiar: AMTRANS, contractant: Institutul National de Cercetare-Dezvoltare pentru Tehnologii Criogenice si Izotopice - ICSI Rm. Valcea, nr. 2354/.2006, 2006-2008;

Pn4. **Mihai Oproescu**, membru, AMTRANS - tema: Cercetari teoretice si experimental demonstrative ale sistemelor de propulsie electrica si hibrida pentru dezvoltarea sistemelor de transport competitive si durabile, MEC- PNCDI- AMTRANS, 2006-2008, director proiect Lefter Emilian.

Pn5. **Mihai Oproescu**, membru, MATNANTECH- tema: Pelicule polimere în sistem compozit utilizate ca mijloace de ecranare electromagnetica în domeniul microundelor, MEC- PNCDI – MATNANTECH, 2006-2008;

Pn6. **Mihai Oproescu**, membru, AMTRANS - tema: Tehnologie pe baza de materiale nanostructurate pentru condensatori electrochimici cu strat dublu utilizabili la stocarea energiei electrice (supercondensatori), MEC- PNCDI - AMTRANS, 2006-2008, director proiect Scheianu Dumitru.

Pn7. **Mihai Oproescu**, membru, Nr. X2C32 tema: Sistem mecanic pentru cuplarea surselor de putere termica si electrica, destinat automobilelor ecologice cu propulsie hibrida, MEC – PNCDI, 2006-2008, director proiect Popa Dinel.

Pn8. **Mihai Oproescu**, membru, Computer system design, simulation, testing and configuring smart renewable energy power systems (Sistem informatic de proiectare, simulare, testare si configurare a sistemelor energetice inteligente de energie regenerabila – SINERG), PNCD II 4 Parteneriate PC 22140 (4480/25.09.2008) : beneficiar: AMCSIT, contractor: Universitatea Politehnica din Bucuresti, 2008-2011; <http://www.sinerg.ro> director proiect Zafiu Adrian.

Pn9. **Mihai Oproescu**, membru, Intelligente locomotion prosthesis (Proteze locomotorii inteligente – INTELPROT), PNCD II 4 Parteneriate PC 11069 (1379/1.10.2007) : beneficiar:

AMCSIT, contractor: Universitatea Politehnica din Bucuresti, 2007-2011; <http://www.intelprot.ro>, director proiect Zafiu Adrian.

Pn10. **Mihai Oproescu**, membru, Research on intelligent control of hybrid electric propulsion system with continuous transmission (Cercetări privind controlul inteligent al unui sistem de propulsie electric hibrid cu transmisie continua - CVT), PNCD II 4 Parteneriate PC 72209 (3733/1.10.2008): beneficiary: AMCSIT, contractor: Universitatea din Pitesti, 2008-2011; <http://www.electromet.upit.ro>, director de proiect Eugen Diaconescu.