Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	Loránd SZABÓ	
Address(es)	50, Racoviţa str, 400165, Cluj, Romania	
Telephone(s)	+40-264-401-827	Mobile:
Fax(es)	+40-264-264-593-117	
Nationality	Romanian	
Date of birth	12nd June, 1960	
Gender	male	

Desired employment / Occupational field

Work experience

Dates	2006-
Occupation or position held	Professor
Main activities and responsibilities	Teaching and research
Name and address of employer	Technical University of Cluj, Electrical Machines Department
Type of business or sector	Higher education
Dates	2003-2006
Occupation or position held	Associated professor
Main activities and responsibilities	Teaching and research
Name and address of employer	Technical University of Cluj, Electrical Machines Department
Type of business or sector	Higher education
Dates	1999-2003
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching and research
Name and address of employer	Technical University of Cluj, Electrical Machines Department
Type of business or sector	Higher education

Dates	1990-1999
Occupation or position held	Engineer
Main activities and responsibilities	Electrical equipment designer
Name and address of employer	Technical University of Cluj, Practical Training Department
Type of business or sector	Higher education
Dates	1985-1990
Occupation or position held	Engineer
Main activities and responsibilities	Maintenance engineer for power electronics devices
Name and address of employer	CLA Cement Factory - Aleşd, Romania
Type of business or sector	Industry

Education and training

Dates	1991-1995
Title of qualification awarded	Ph.D.
Principal subjects/occupational skills covered	Electrical engineering (electrical machines)
Name and type of organisation providing education and training	Technical University of Cluj
Level in national or international classification	Doctoral studies (level 9)
Dates	1980-1985
Title of qualification awarded	Electrotechnical engineer
Principal subjects/occupational skills covered	Electrical engineering
Name and type of organisation providing education and training	Polytechnic Institute of Cluj, Electrotehnical Faculty
Level in national or international classification	Higher education (level 8)

Personal skills and competences

Mother tongue(s): Hungarian

Other language(s)	Understanding				Speaking				Writing	
Self-assessment	Listening		Reading		Spoken interaction		Spoken production			
European level (*)										
Romanian	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
English	B2	Intermediate	B2	Intermediate	B2	Intermediate	B2	Intermediate	B2	Intermediate

(*) Common European Framework of Reference for Languages

Social skills and competences

Organized person
Good abilities for synthetic and global views over concrete situations
End-oriented work capacity
Problem-solving attitude
Responsibility, self-respect and self-reliance

Organisational skills and competences	Focus oriented – I build a focus on a certain goal that I wish to achieve. I alienate myself from any distractions in between. Prioritization – I prioritize activities in a way that synergize the effect in a fruitful manner. I put forward smaller milestones and prioritize efforts accordingly. Timelines driven – I mark time-lines to achieve/ complete certain tasks. I try my best to achieve it on time.
Technical skills and competences	Research interests: CAD in electrical drives and machines, modelling and simulation of electrical machines and drives, fault detection and condition monitoring of electrical machines, bio-inspired control systems for electrical machines, etc.
Computer skills and competences	General purpose: Word, Excel, PowerPoint Internet browser: Internet Explore, Mozilla Firefox, Chrome, Opera Programming environments: Matlab, LabVIEW Electromagnetic CAD: MagNet, Flux 2D, AnSys Simulation environments: SIMULINK, CASPOC, Simplorer Programming languages: Turbo PASCAL, BASIC CAD: AutoCAD, OrCAD, Protel Graphics, image processing: CorelDraw, Corel Photo Paint, IrfanView, SmartDraw, Visio, GIF animator WEB design: Dreamweaver
Artistic skills and competences	Painting
Other skills and competences	
Driving license	Category B
Additional information	Home page: http://memm.utcluj.ro/szabo_lorand.htm
Annexes	Annex 1: Scientific Activity Annex 2: Most Significant Publications

ANNEX 1
SCIENTIFIC ACTIVITY

Publications

- 215 publications in:
  - textbooks and books, respectively book chapters (9)
  - in refereed journals and periodicals (32)
  - in refereed proceedings of international conferences (87)
  - in Romanian university annals (27)
  - others (60)

Research projects

- project manager for 3 international projects.
  - Condition monitoring of linear and rotational electrical machine drives by means of advanced data processing instruments, Joint Research Project between the University of Miskolc (Hungary) and Technical University of Cluj-Napoca (Romania) within the framework of the Bilateral Scientific and Technological Cooperation Romania – Hungary (2006-2007)
  - Advanced remote control, condition monitoring and diagnosis of rotational and linear electromechanical actuators used in automated industrial systems, Joint Research Project between the University of Miskolc (Hungary) and Technical University of Cluj-Napoca (Romania) within the framework of the Bilateral Scientific and Technological Cooperation Romania – Hungary (2008-2009)
  - Improved performance variable reluctance machines for safety-critical industrial process applications, Joint Research Project between the University of Zilina (Slovak Republic) and Technical University of Cluj-Napoca (Romania) within the framework of the Bilateral Scientific and Technological Cooperation Romania – Slovakia (2011-2012)
- project manager for 5 national projects.
  - Design, modeling and optimization of a surface motor, Beneficiary: Ministry of Education, Research and Youth, National University Research Council, Grant type AT (2001)
  - Planar motors, Beneficiary: Research Program Institute of the "Sapientia" Foundation (2001-2002)
  - Modular planar motor for flexible manufacturing lines, Beneficiary: Ministry of Education, Research and Youth, National University Research Council, Grant type A (2003-2005)
  - Study of linear generators used for powering advanced portable electric devices, Beneficiary: Research Program Institute of the "Sapientia" Foundation (2006-2007)
  - Linear generators for wave power converters, Beneficiary: Ministry of Education, Research and Youth, National University Research Council, Grant type A (2006-2008)
- member of the research team for 23 government funded grants and 16 projects for industrial beneficiaries. The latest such grants are:
  - Electrical machines' and drives' rapid-prototyping, testing and diagnosis platform, Beneficiary: Ministry of Education and Research, Grant Capacities I, project manager: Claudia Marţiş (2007-2009).
  - Improvement of impact and efficiency of the "Electrical machines' and drives' rapid-prototyping, testing and diagnosis platform". Beneficiary: Ministry of Education and Research, Grant Capacities II, project manager: Claudia Marţiş (2007-2009).
  - Fault-tolerant equipment controlled by bio-inspired electronic architectures, Beneficiary: Ministry of Education and Research, Grant Partnerships, project manager: Csaba Szász (2008-2011).

Awards at technical exhibitions

- Gold medal at the *PRO INVENT International Invention Show*, Cluj (Romania), 2010
- Bronze medal at the *INVENTIKA International Fair of Inventions*, Bucharest (Romania), 2010
- Silver medal at the *International Warsaw Inventions Show IWIS '2010*, Warsaw (Poland), 2010
- Silver medal at the *European Exhibition of Creativity and Innovation EUROINVENT '2011*, Iaşi (Romania), 2011
- Bronze medal at the *PRO INVENT International Invention Show*, Cluj (Romania), 2012.

Presentations at major meetings

- *PCIM - International Conference on Power Conversion and Intelligent Motion*, Nuremberg (Germany), 1992, 1993, 1994, 1995, 1996, 1997, 1999, 2001, 2004, 2005, 2006, 2008 and 2011.
- *OPTIM - International Conference on Optimization of Electric and Electronic Equipment*, Braşov (Romania), 1996, 1998, 2008 and 2010.
- *EMES - International Conference on Engineering of Modern Electric Systems*, Oradea (Romania), 1999, 2001, 2003 and 2005.
- *ENELKO - Conference on Energetics and Electrotechnics*, Cluj (Romania), 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 and 2011.
- *MicroCAD - International Computer Science Conference*, Miskolc (Hungary), 2001, 2003, 2005, 2006, 2007, 2008, 2009, 2010 and 2011.
- *IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, Cluj (Romania), 1998, 2002, 2004, 2006, 2008 and 2010.
- *ICEM International Conference on Electrical Machines*
  - Vilamoura (Portugal), 2008
  - Rome (Italy), 2010
- *EPE-PEMC - International Power Electronics and Motion Control Conference*

  - 2002 in Cavtat/Dubrovnik (Croatia)
  - 2006 in Portoroz (Slovenia)
- *IEEE Joint German IAS/PELS/IES Chapter Meeting*, Regensburg (Germany), 2003
- *INES - IEEE International Conference on Intelligent Engineering Systems*
  - 2004 in Cluj (Romania)
  - 2007 in Budapest (Hungary)
- *ICM '2006 - IEEE International Conference on Mechatronics*, Budapest (Hungary), 2006.
- *IEMDC '2007 - IEEE International Conference on Electrical Machines and Drives*, Antalya (Turkey), 2007.
- *ICCEP '2007 - International Conference on Clean Electrical Power*, Capri (Italy), 2007.
- *ECMS '2009 - 23rd European Conference on Modelling and Simulation*,
  - Madrid (Spain), 2009.
  - Krakow (Poland), 2011.
- *ELS '2009 - 3rd International Symposium on Electrical Engineering and Energy Converters*, Suceava (Romania), 2009.
- *LDIA '2011 - Eighth International Symposium on Linear Drives for Industry Applications*, Eindhoven, (The Netherlands)
- *LINDI '2011 - 3rd IEEE International Symposium on Logistics and Industrial Informatics*, Budapest (Hungary)
- *ISCIII '2011 - 5th International Symposium on Computational Intelligence and Intelligent Informatics*, Floriana (Malta).

Fellowships, short-term visits

- Research Fellow at *Technical University of Budapest* (Hungary) at the Electrical Machines and Drives Department in 1992 and 2002
- Visting *Fachhochschule Karlsruhe* and *Fachhochschule Frankfurt am Main* (Germany) in 1998.
- Research Fellow at *University of Miskolc* (Hungary), Institute of Electrical Engineering in 2002, 2004, 2006, 2007 and 2008.
- Research Fellow at *University of Veszprém* (Hungary), Department of Automation in 2003 and 2004.
- Visiting *Vienna University of Technology, Institute of Electrical Drives and Machines* (Austria) in 2005 and 2006.

Expert and reviewer

- Expert for *INTAS* (ID: 4413) since 2003, *INTAS=International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union* (formed by the European Community) since 2004.
- Expert for *FP6*, respectively *FP7* (ID: EX2002B039458) since 2003, *FP – Research Framework Programme* (European Community)
- Expert for *EACEA* (*Education, Audiovisual and Culture Executive Agency*) – Youth in Action Programme' since 2010.
- Expert for *SEE-ERA.NET* (ID: 4413) *SEE-ERA.NET=Southeast European Era-Net*, since 2007.
- Expert for *GNSF* (*Georgian National Science Foundation*) since 2006.
- Expert for *CNCSIS* (*Romanian National Council of Higher Education Scientific Research*), (ID: 16260/2005) since 2003.
- Expert for *ARACIS* (*Romanian Agency for Quality Assurance in Higher Education*) nr. 691/Electrical engineering, since 2006.
- Research project reviewer for *Research Programme Institute of "Sapientia" Foundation*, Cluj (Romania), since 2003.
- Reviewer for journals: *IEEE Transactions on Industrial Electronics* (ISSN: 0278-0046), *Journal of Energy and Power Engineering* (David Publishing Company, ISSN 1934-8975), *Measurement* (Journal of the International Measurement Confederation, Elsevier, ISSN 0263-2241), *Environmental Engineering and Management Journal* (ISSN 1843 3707), *International Journal of Electrical Engineering and Transportation* (IJEET, ISSN 1773-9357), *Iranian Journal of Electrical and Computer Engineering* (ISSN 1682-0053). *Intelligent Systems at the Service of Mankind* (Ubooks, Augsburg, Germany), *International Journal of Energy Optimization and Engineering* (IJEOE, Information Resources Management Association, ISSN: 2160-9500) etc.
- Reviewer for international conferences: *International Power Electronics and Motion Control Conference (EPE-PEMC '2006)*, Portoroz (Slovenia), *33rd IEEE Annual Conference on Industrial Electronics (IECON' 07)*, Taipei (Taiwan), *2007 IEEE International Symposium on Industrial Electronics (ISIE '07)*, Vigo (Spain), *IEEE International Conference on Electrical Machines and Drives (IEMDC '2007)*, Antalya (Turkey), *IEEE International Conference on Industrial Technology (ICIT '2008)*, Chengdu (China), *IEEE International Conference on Power System Technology (POWERCON '2008)*, New Delhi (India), *International Youth Conference on Energetics (IYCE '2009)*, Budapest (Hungary), *European Conference on Power Electronics and Applications (EPE '2009)*, Barcelona (Spain), *European Conference on Modelling and Simulation (ECMS '2009)*, Madrid (Spain), *IEEE Region 8 EUROCON Conference (EUROCON '2009)*, St. Petersburg (Russia), *IEEE International Conference on Electrical Machines and Drives* (IEMDC '2009), Miami (USA), *IEEE International Symposium on Industrial Electronics (ISIE '2010)*, Bari (Italia), *24th European Conference on Modelling and Simulation (ECMS '2010)*, Kuala Lumpur (Malaysia), *7th International Conference on Electrical Engineering (ICEENG-7)*, Cairo (Egypt), *19th International Conference on Electrical Machines (ICEM '2009)*, Rome (Italy), *36th Annual Conference of the IEEE Industrial Electronics Society (IECON '2010)*, Phoenix (AZ, USA), *8th IEEE International Conference on Industrial Informatics (INDIN '2010)*, Osaka (Japan), *European Conference on Modelling and Simulation (ECMS '2011)*, Krakow (Poland), *European Conference on Power Electronics and Applications (EPE '2011)*, Birmingham (UK), *IEEE Region 8 EUROCON Conference (EUROCON '2011)*, Lisbon (Portugal), *13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM '2012)*, Braşov (Romania), etc.

ANNEX 2
MOST SIGNIFICANT PUBLICATIONS

1. Viorel I.A. – Szabó L.: Hybrid Linear Stepper Motors, Editura Mediamira, Cluj-Napoca, 1998. ISBN 973-9358-12-8.
2. Viorel I.A. – Ivan D.M. – Szabó L.: Numerical methods applied in electrical engineering (in Romanian), Oradea University Publishing House, 2000. ISBN 973-8083-29-X.
3. Szabó L.: Programming environments used in electrical engineering – MATLAB (in Romanian), Mediamira, Cluj, 2003. ISBN: 97-9357-23-7.
4. Bíró K.Á. – Viorel I.A. – Szabó L. – Henneberger G.: Special electrical machines (in Romanian), Mediamira, Cluj, 2005. ISBN 973-713-055-3.
5. Szabó L. – Fodorean D.: Simulation of the converter-machine assembly used in electromechanical systems (in Romanian), U.T. Press, Cluj, 2009. ISBN: 978-973-662-480-3.
6. Szabó L. – Dobai B.J. – Bíró K.Á.: Discrete Wavelet Transform Based Rotor Faults Detection Method for Induction Machines, Intelligent Systems at the Service of Mankind, vol. 2., (eds: Elmenreich, W., Machado, J.T., Rudas, I.J.), Ubooks, Augsburg, 2005, pp. 63-74. ISBN: 3-86608-052-2.
7. Viorel I.A. – Szabó L.: Permanent-Magnet Variable-Reluctance Linear Motor Control, Electromotion, vol. 1., no. 1. (1994), pp. 31-38. ISSN: 1223-057X.
8. Viorel I.A. – Crivii M. – Löwenstein L. – Szabó L. – Gutman M.: Direct Drive Systems with Transverse Flux Reluctance Motors, Acta Electrotehnica, vol. 44, no. 3, 2004, pp. 33-40. ISSN: 1224-2487.
9. Viorel I.A. – Szabó L. – Löwenstein L. – Şteţ C.: Integrated Starter-Generators for Automotive Applications, Acta Electrotehnica, vol. 44, no. 3, 2004, pp. 255-260. ISSN: 1224-2487.
10. Szabó L. – Ruba M.: Fault Tolerant Switched Reluctance Motor for Safety-Critical Automotive Applications, International Journal of Electrical Engineering and Transportation (IJEET), vol. 5, no 1, pp. 23-27, ISSN: 1773-9357.
11. Szabó L. – Viorel I.A.: Comparison of Precise Positioning Systems Using Switched Reluctance and Hybrid Linear Stepper Motors by Means of Computer Simulation, Proceedings of the International Conference on Automation and Quality Control (A&Q), Cluj-Napoca, 1998, Vol. Quality, Design, Development, pp. Q472-Q477. ISBN: 973-9358-15-2.
12. Szabó L. – Viorel I.A. – Chişu I. – Kovács Z.: A Novel Double Salient Permanent Magnet Linear Motor, Proceedings of the International Conference on Power Electronics, Drives and Motion (PCIM), Nürnberg, 1999, vol. Intelligent Motion, pp. 285-290. ISBN: 3-928643-23-1.
13. Szabó L. – Viorel I.A.: An Integrated CAD Environment for Designing and Simulating Double Salient Permanent Magnet Linear Motors, Proceedings of the International Conference on Power Electronics, Drives and Motion (PCIM), Nürnberg, 2001, vol. Intelligent Motion, pp. 417-422. ISBN: 3-928643-28-2.
14. Szabó L. – Dobai J.B.: Combined FEM and SIMULINK Model of a Modular Surface Motor, Proceedings of the IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics A&QT-R 2002 (THETA 13), Cluj, tome I., pp. 277-282, on CD: 1_2_29_Szabo Lorand.pdf. ISBN: 9739357-10-3.
15. Szabó L. – Viorel I.A.: On a High Force Modular Surface Motor, Proceedings of the 10th International Power Electronics and Motion Control Conference (PEMC '2002), Cavtat & Dubrovnik, on CD: T8-052.pdf. , 2002. ISBN: 953-184-046-6.
16. Szabó L. – Viorel I.A. – Dobai J.B.: Multi-Level Modelling of a Modular Double Salient Linear Motor, Proceedings of the 4th International Symposium on Mathematical Modelling (MATHMOD '2003), Vienna, pp. 739-745, on CD: 115-Text-Lorand-Szabo.pdf. ISBN: 3-901-608-24-9.
17. Viorel I.A. – Szabó L. – Gutman M. – Puklus Z.: Transverse Flux Motor Drive Dynamics, Proceedings of the 8th IEEE International Conference on Intelligent Engineering Systems INES '2004, Cluj (Romania), 2004, pp. 393-396. ISBN: 973-662-120-0.
18. Szabó L. – Viorel I.A. – Dobai B.J. – Szépi I.: Optimal Trajectory Generation for a Modular Planar Motor Used in Flexible Manufacturing Systems, Proceedings of the 11th International Power Electronics and Motion Control Conference (EPE-PEMC '2004), Riga, on CD: A53272.pdf. ISBN: 9984-32-070-7.
19. Szabó L. – Dobai B.J. – Bíró K.Á. – Fodor D. – Tóth F.: Study on Squirrel Cage Faults of Induction Machines by Means of Advanced FEM Based Simulations, Proceedings of the International Conference on Electrical Drives and Power Electronics (EDPE' 2005), Dubrovnik (Croatia), on CD: E05-78.pdf. ISBN: 953-6037-43-2.
20. Viorel I.A. – Szabó L. – Tomescu Ilinca: Electrical Machines Computer Simulation by Using Circuit-Field Models, Acta Electrotehnica, vol. 45, no. 4, 2005, pp. 195-203. ISSN: 224-2487.
21. Viorel I.A. – Fodorean D. – Viorel A. – Szabó L.: Stand-Alone Double-Excited Synchronous Generator Operating on a Variable Load, Proceedings of the International Conference on Power Electronics, Intelligent Motion and Power Quality (PCIM '2006), Nürnberg, 2006, pp. 675-680. ISBN: 3-928643-43-6.
22. Szabó L. – Popa D.C. – Iancu V.: Compact Double Sided Modular Linear Motor for Narrow Industrial Applications, Proceedings of the 12th International Power Electronics and Motion Control Conference (EPE PEMC '2006), Portoroz (Slovenia), 2006, pp. 1064-1069. ISBN: 1-4244-0121-6.
23. Szabó L. – Oprea C. – Viorel I.A. – Bíró K.Á.: Novel Permanent Magnet Tubular Linear Generator for Wave Energy Converters, Proceedings of the IEEE International Conference on Electrical Machines and Drives (IEMDC '2007), Antalya (Turkey), vol. 2, pp. 983-987. ISBN: 1-4244-0742-7.
24. Szabó L. – Oprea C.: Wave Energy Plants for the Black Sea – Possible Energy Converter Structures, Proceedings of the International Conference on Clean Electrical Power (ICCEP '2007), Capri (Italy), 2007, pp. 306-311. ISBN: 1-4244-0632-3.
25. Szabó L. – Bíró K.Á. – Nicula Cosmina – Jurca F.: Useful Simulation Tool for Induction Generators Used In Wind Power Plants, Proceedings of the International Conference on Clean Electrical Power (ICCEP '2007), Capri (Italy), 2007, pp. 574-579. ISBN: 1-4244-0632-3.

26. Szabó L. – Bíró K.Á. – Nicula Cosmina – Jurca F.: Simulation of Wind Turbine Driven Autonomous Squirrel Cage Induction Generators, Proceedings of the 11th IEEE International Conference on Intelligent Engineering Systems (INES '2007), Budapest (Hungary), 2007, pp. 213-218, ISBN: 1-4244-1147-5.
27. Szabó L. – Viorel I.A. – Oprea C.: Comparative Study By Means Of FEM Based Computations On The Linear Generators To Be Used In Wave Energy Converters, Proceedings of the 16th International Conference on the Computation of Electromagnetic Fields (COMPUMAG '2007), Aachen (Germany), pp. 369-370.
28. Szabó L. – Ruba M. – Fodorean D.: Simple Converter Structure for Fault Tolerant Motors, Proceedings of the 2008 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR '2008) THETA 16, Cluj (Romania), 2008, pp. 244-249, ISBN: 978-1-4244-2576-1.
29. Szabó L. – Ruba M. – Fodorean D.: Study on a Simplified Converter Topology for Fault Tolerant Motor Drives, Proceedings of the 11th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM '2008), Braşov (Romania), 2008, pp. 197-202. ISBN: 1-4244-1545-4.
30. Viorel I.A. – Szabó L. – Strete Larisa: Speed-thrust Control of a Double Sided Linear Switched Reluctance Motor (DSL-SRM), Proceedings of the 18th International Conference on Electrical Machines (ICEM '2008), Vilamoura (Portugal), on CD: Fullpaper_comm_id00879.pdf. ISBN: 978-1-4244-1736-0.
31. Szabó L. – Oprea C. – Feştilă C. – Dulf Éva: Study on a Wave Energy Based Power System, Proceedings of the 18th International Conference on Electrical Machines (ICEM '2008), Vilamoura (Portugal), on CD: Fullpaper_comm_id01199.pdf. ISBN: 978-1-4244-1736-0.
32. Szabó L. – Ruba M.: On Fault Tolerance Increase of Switched Reluctance Machines, Proceedings of the IEEE Region 8 EUROCON Conference (EUROCON '2009), St. Petersburg (Russia), 2009, pp. 734-739. ISBN: 978-1-4244-3860-0.
33. Fodorean D. – Szabó L. – Miraoui A.: Generator Solutions For Stand Alone Pico-Electric Power Plants, Proceedings of the IEEE International Conference on Electrical Machines and Drives (IEMDC '2009), Miami (USA), 2009, pp. 522-526. ISBN: 978-1-4244-4252-2.
34. Szász Cs. – Chindriş V. – Szabó L.: Modeling and Simulation of Embryonic Hardware Structures Designed on FPGA-based Artificial Cell Network Topologies, Proceedings of the 23rd European Conference on Modelling and Simulation (ECMS '2009), Madrid, 2009, pp. 613-617, ISBN: 978-0-9553018-8-9.
35. Szabó L. – Ruba M.: Using Co-Simulations in Fault Tolerant Machine's Study, Proceedings of the 23rd European Conference on Modelling and Simulation (ECMS '2009), Madrid, 2009, pp. 756-762, ISBN: 978-0-9553018-8-9.
36. Szabó L. – Ruba M. – Jurca F.: Fault Tolerant Switched Reluctance Machine for Wind Turbine Blade Pitch Control, Proceedings of the International Conference on Clean Electrical Power (ICCEP '2009), Capri (Italy), 2009, pp. 721-726. ISBN: 978-1-4244-2543-3.
37. Ruba M. – Szabó L.: Fault Tolerance Study of Switched Reluctance Machines by Means of Advanced Simulation Techniques, Pollack Periodica (Academic Publisher, Budapest), vol. 4, no. 2 (August 2009), pp. 107-116. ISSN: 1788-1994.
38. Ruba M. – Szabó L.: Fault Tolerant Switched Reluctance Machine's Comparative Analysis, Proceedings of the 3rd International Symposium on Electrical Engineering and Energy Converters (ELS '2009), Suceava, 2009, pp. 75-80. ISSN: 2066-835X.
39. Ruba M. – Benţia Ioana – Szabó L.: Novel Modular Fault Tolerant Switched Reluctance Machine for Reliable Factory Automation Systems, Proceedings of the 2010 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR '2010) THETA 17, Cluj (Romania), 2010, Tome III, pp. 47-52, ISBN: 978-1-4244-6722-8.
40. Ruba M. – Benţia Ioana – Szabó L.: Novel Modular Switched Reluctance Machine for Safety-Critical Applications, Proceedings of the 19th International Conference on Electrical Machines (ICEM '2010), Roma (Italy), on CD: RF-011029.pdf. ISBN: 978-1-4244-4175-4.
41. Benţia Ioana – Ruba M. – Szabó L.: A Rotary-Linear Switched Reluctance Motor for Advanced Industrial Applications, Proceedings of the International Conference on Power Electronics, Intelligent Motion and Power Quality (PCIM '2011), Nürnberg, 2011, pp. 947-952, ISBN: 978-3-8007-3344-6.
42. Chindriş V. – Terec R. – Ruba M. – Szabó L – Rafajdus, P.: Useful Software Tool for Simulating Switched Reluctance Motors, Proceedings of the 25th European Conference on Modelling and Simulation (ECMS '2011), Krakow (Poland), 2011, pp. 216-221. ISBN: 978-0-9564944-2-9.
43. Oprea C. – Marţiş C. – Fodorean D. – Jurca F. – Szabó L.: Permanent Magnet Linear Generator for Renewable Energy Applications: Tubular vs. Four-Sided Structures, Proceedings of the International Conference on Clean Electrical Power (ICCEP '2011), Ischia (Italy), 2011, pp. 588-592. ISBN: 978-1-4244-8927-5X.
44. Káptalan Erna – Szabó L. – Szász Cs. – Néda Z.: Collective Behavior – A General Survey, Journal of Computer Science and Control Systems, vol. 4, no. 1, 2011, pp. 53-60. ISSN: 1844-6043.
45. Ruba M. – Surdu Felicia – Szabó L.: Study of a Nine-Phase Fault Tolerant Permanent Magnet Starter-Alternator, Journal of Computer Science and Control Systems, vol. 4, no. 1, 2011, pp. 149-154. ISSN: 1844-6043.
46. Szabó L. – Káptalan Erna – Szász Cs.: Applications of Collective Behavior Concepts in Flexible Manufacturing Systems, Journal of Computer Science and Control Systems, vol. 4, no. 1, 2011, pp. 187-193. ISSN: 1844-6043.
47. Chindriş V. – Terec R. – Ruba M. – Szabó L.: Software environment for online simulation of switched reluctance machines, Advances in Intelligent Modelling and Simulation (eds.: Byrski, A. et al.), Simulation Tools and Applications Series: Studies in Computational Intelligence, vol. 416, pp. 85-109, Springer (Berlin). 2012. ISBN: 978-3-642-28887-6.
48. Gaeid K.F. – Ping H.W. – Masood M.K. – Szabó L.: Survey of Wavelet Fault Diagnosis and Tolerant of Induction Machines with Case Study, International Review of Electrical Engineering (I.R.E.E.), vol. 7, no. 3 (May-June 2012), pp. 4437-4457. ISSN: 1827-6660.