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PERSONAL INFORMATION

DIMIAN Mihai

STEFAN CEL MARE UNIVERSITY OF SUCEAVA
[redacted]
[redacted]
[redacted]
[redacted] (Skype)

Sex Male | Date of birth 09/02/1975 | Nationality Romanian

POSITION WITHIN THE PROJECT

Partner 1 (Stefan cel Mare University) Project Responsible & Senior Researcher I

WORK EXPERIENCE

2012 – present / 2007 - 2011
Vice-Rector for Scientific Activities and Professor; PhD Supervisor in the area of Electronics, telecommunications and information technologies / Associate Professor
Stefan cel Mare University, Suceava, Romania (www.usv.ro)
Faculty of Electrical engineering and Computing Science, 13 Universitatii St., building D, Suceava 720229, Romania
- Service in research, development and innovation activity of the university
- Didactic and research activities in the field of Electronic Engineering, Telecommunications and Nanotechnologies

2012 – 2017 / 2006 – 2012
Associate Professor (tenured) & PhD Supervisor / Assistant Professor
Howard University, Faculty of Electrical Engineering and Computers, 2400 Sixth Str. NW, Room LKD 3107, Washington, DC 20059, U.S.A.
- Didactic and research activities in the field of Electronic Engineering,Telecommunications and Nanotechnologies

2005 – 2006
Associate Researcher
Max Planck Institute, Department of Applied Mathematics in Science and Engineering, 22 Inselstrasse, Leipzig, D-04103, Germania
- Research in modeling and simulation in engeneering and applied science

2001 - 2005
Distinguished Graduate Research Assistant
Maryland University, Faculty of Electrical Engineering and Computers, Paint Branch Str., A.V. Williams Bldg., College Park, MD 20740 U.S.A.
- Didactic and research activities in the field of Electronic Engineering, Telecommunications and Nanotechnologies

March 2001 – June 2005
Research Assistant
Universitatea Versailles-St. Quentin, Laboratory of Magnetism and Optics
45 Etates Unites Avenue , Versailles 78035, Franta
- Research activities in Physics

EDUCATION AND TRAINING

2001 - 2005
Doctor in Philosophy in Electrical / Electronics Engineering
University of Maryland, College Park, USA - Faculty of Electrical Engineering and Computers
ISCED 6

1997 - 2001
Bachelor of Science in Physics
Alexandru Ioan Cuza University, Iasi, Romania – Faculty of Physics
ISCED 5

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1998 – 2000	Computer Science – studies interrupted due to studies abroad Alexandru Ioan Cuza University, Iasi, Romania – Faculty of Computer Science ISCED 5
1998 – 2000	Master of Science in Dynamical Systems and Theoretical Mechanics Alexandru Ioan Cuza University, Iasi, Romania – Faculty of Mathematics ISCED 6
1993 – 1997	Bachelor of Science in Mathematics Alexandru Ioan Cuza University, Iasi, Romania – Faculty of Mathematics ISCED 5

PERSONAL SKILLS

Mother tongue(s): Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	C1	C1	B2	B1	B1

Levels: A1/2: Basic user – B1/2: Independent user – C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Clarity and consion, nonverbal communication, active listening, constructive feedback, adaptability to different types of auditorium, umor, empathy, respect
- Extensive experience in writing research proposal, research reports, article and book, as well as in refereeing and editing for research journals; 2 years experience as Director of Communications and Public Relations Department at USV

Organisational / managerial skills

- Decision making, problem solving, creativity, leardership, ability to attract and motivate colleagues, team organiser
- Extensive experience in more than 20 international and national research and development projects in various positions, including project manager/responsible for 10 international and national projects, 6-year experience as Vice-Rector for Scientific activities at USV, 8 months as Acting Rector at USV

Job-related skills

- Ability to coordinate research teams (project manager/responsible for 10 international and national project, 6-year experience as Vice-rector for Scientific Activities at USV, 8 months as Acting Rector at USV)
- Ability to perform research in optoelectronics, microwave engineering and theoretical physics
- Ability to perform statistical analysis and advanced data management

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

PC operation – Office, databases, etc., Maple, Matlab, C, C++

Driving licence: No

ADDITIONAL INFORMATION

- Chairman – comission for Electronics, Telecommunications and Nanotechnologies of the National Counsil for Titles, Diplomas and Certificates (CNATDCU)
- Associate Editor of the ISI Journal Advanced in Electrica land Computer Engineering

- Constantin Miculescu Prize of Romanian Academy (2014)
- Member of the National Council of Scientific Research
- 3rd Prize – Romanian Researcher of the Year, Dinu Patriciu Foundation (2009)
- Faculty of the Year, Student Council, College of Engineering, Arch. & Computer Sc. (2008)
- Service Award, ECE Department, Howard University (2008)
- Distinguished Research Assistant, Universty of maryland, College PARK (2002, 2003, 2004)

Project Director

- Hybrid platform of visible light communications and augmented reality for the development of intelligent systems for active driver assistance and vehicle safety, PN III – Complex projects completed in consortia CDI, contract no. 21PCCDI/2018; Budget: 4.325.472 RON , Period: 05.2018 – 11.2020.
- Automotive Visible Light Communication System with Environment - Adaptive capabilities, PN III – Experimental demonstration project, contract no. 36PED/2017, Budget: 596.440 RON, Period: 01.2017 – 06.2018.
- Analysis of noise and fluctuations induced phenomena in spintronics and semiconductor nanodevices, Romanian National Research Contract – Young Research Teams, no. 107/06.08.2010, budget: 547 000 RON, period: 1.07.2011 – 30.06.2014
- Constructive and disruptive effects of noise in nonlinear systems with hysteresis, European Framework 7 – Marie Curie Actions, contract no. 224904/1.05.2008, Budget: 100 000 Euro, Period: 05.2008–04.2012.
- Dynamics and stachastic analysis of nonlinear hysteretic systems with hysteresis, European Framework 7 Marie Curie Actions, contract no. 224904/1.05.2008, budget: 100000 Euro, period: 1.10.2007 – 30.09.2009
- Analysis of magnetization dynamics and relaxation in magnetic memories, Howard University Grant for Academic Excellence, Budget: 24 000$, Period: 01.01 - 31.12.2007
- Mathematical models for magnetic devices, Max Planck Institute for Applied Mathematics, Leipzig, Germany; Budget: 50 000 Euro; Period: 01.10.2005-30.09.2006

Project responsible

- Partner Responsible - LHCb – studies of hadron production, heavy flavour physics and the upgrade program, Romanian National Research Contract, Romania – CERN Collaborations, Period: 2016-2018, Coordinated Budget: 696 189 lei
- Adjunct Director - The analysis of interrelationship between gut microbiota and the host with applications in the prevention and control of type 2 diabetes, co-financed by European Regional Development Fund through Competitiveness Operational Programme, contract 120/16.09.2016, Period: 2016-2020, Budget: 9.331.538 lei
- Scientific Coordinator - Integrated Center for research, development and innovation in Advanced Materials, Nanotechnologies, and Distributed Systems for fabrication and control, Sectoral Operational Program for Increase of the Economic Competitiveness co-funded by European Regional Development Fund. Period: 2015, Budget: 31.460.699 lei
- Partner Responsible - LHCb – from strangeness to b hadron physics and beyond, Romanian National Research Contract, Romania – CERN Collaborations, 2015, Coord. Budget: 192 000 lei
- Partner Responsible - Development of reconfigurable system for smart building control and management of energy sources generated by renewable sources, Innovative Cluster EURONEST, European Structural Fund POSCCE, Period: 2014-2015, Coord. Budget: 203.918 lei
- Electromagnetics Group Coordinator - Bayesian Imaging and Advanced Signal Processing for Landmine and IED Detection Using GPR, US Army Research Office, Period: 2011-2016, Budget: 2 500 000 $, Howard University Electromagnetics Group Coordinator
- Electromagnetics Group Coordinator - Physics based land mine detection algorithms using hyperspectral images; U.S. Army High Performance Computing Research Center, no. 033893, Budget: 78 000$, Period: 01.01.2006- 31.12.2006.

Grant Member

- Involved in additional 14 research and development grants (6 in USA and 8 in U.E.)

Books (selection)

- **Mihai Dimian**, P. Andrei, "Noise-driven phenomena in hysteretic systems," Springer Publisher, New York, U.S.A., 233 pages, 2014, ISBN 978-1-4614-1373-8
- **Mihai Dimian** – „Aspecte stocastice și dinamice ale sistemelor cu histeresis" Editura Mediamira, Cluj Napoca, Romania, Număr pagini: 170, Data: Decembrie 2010, ISBN: 978-973-713-281-9.
- **Mihai Dimian** - "Nonlinear spin dynamics and ultra-fast precessional switching" Editura ProQuest Information and Learning, Ann Arbor, Statele Unite ale Americii, Număr pagini: 141, Data: Decembrie 2005, ISBN: 0-542-18364-1.

ISI papers (selection)

[1] A. Cailean, **M. Dimian**, Current Challenges for Visible Light Communications Usage in Vehicle Applications: A Survey, IEEE Communications Surveys and Tutorials, vol 19 (4), pg. 2681-2703 (2017), ISI impact factor 17,188

[2] A. Cailean, **M. Dimian**, Impact of IEEE 802.15.7 Standard on Visible Light Communications Usage in Automotive Applications, IEEE Communications Magazine, vol. 55 (4), pg: 169-175 (2017), ISI Impact factor: 10,435

[3] A. Cailean, **M. Dimian**, "Towards Environmental-Adaptive Visible Light Communications Receivers for Automotive Applications: A Review," IEEE Sensors Journal, vol. 16, no. 9, pp. 2803-2811, 2016, ISI Impact factor: 1.762.

[4] A. Cailean, **M. Dimian**, L. Chassagne, B. Cagneau, V. Popa, "Novel DSP Receiver Architecture for Multi-Channel Visible Light Communications in Automotive Applications," IEEE Sensors Journal, vol. 16, no. 10, pp. 3597-3602, 2016, ISI Impact factor: 1.762

[5] I. Gudyma, V. Ivashko, **M. Dimian**, "Pressure effect on hysteresis in spin-crossover solid materials," Physica B – Condensed Matter, vol. 486, pp. 40-43, 2016. ISI Impact factor: 1.319

[6] I. Gudyma, A. Maksymov, **M. Dimian**, "Hysteretic behavior of spin-crossover noise driven system," Physica B – Condensed Matter, vol. 486, pp. 44-47, 2016. ISI Impact factor: 1.319

[7] A.-M. Cailean, B. Cagneau; L. Chassagne; **M. Dimian**; V. Popa "Novel Receiver Sensor for Visible Light Communications in Automotive Applications," in IEEE Sensors Journal, vol.15, no.8, pp.4632-4639, 2015, ISI Impact factor: 1.762.

[8] **M. Dimian**, P. Andrei, M. Grayson, "Hybrid models of hysteresis for mixed hysteretic loops in heterogeneous magnetic materials"", Journal of Applied Physics, 115, 2014, art. 17D103. ISI Impact factor: 2,21

[9] I. Gudyma, A. Maksymov, **M. Dimian**, "Stochastic resonance in bistable spin-crossover compounds with light-induced transitions," Physical Review E, vol. 90 (5), art. no. 052135, 2014, .

[10] D. Chiruţă, **M. Dimian**, Y. Alayli, J. Linares, Y. Garcia – " Role of Edge Atoms in the Hysteretic Behaviour of 3D Spin Crossover Nanoparticles Revealed by an Ising-Like Model", European Journal of Inorganic Chemistry, no. 29, pp. 5086-5093, 2013. ISI Impact Factor: 3,12.

[11] I. Gudyma, A. Maksymov**, M. Dimian**, "Stochastic kinetics of photoinduced phase transitions in spin-crossover solids"", Physical Review E, vol. 88, 2013, art. 042111. ISI Impact Factor: 2,313.

[12] D. Chiruta, J. Linares, **M. Dimian**, Y. Garcia, "Size Effect and Role of Short- and Long-Range Interactions on 1D Spin-Crossover Systems within the Framework of an Ising-Like Model", European Journal of Inorganic Chemistry, 2013, Factor de impact ISI: 3,049.

[13] **M. Dimian**, O. Manu, P. Andrei, "Influence of noise color on stochastic resonance in hysteretic systems" Journal of Applied Physics, vol. 111, 2012, ISI IF 2,169,

[14] **M. Dimian**, P. Andrei, O. Manu, V. Popa, "Comparison of noise-induced resonances for different models of hysteresis", IEEE Transactions on Magnetics, vol. 47, no. 10, p. 3825-2838 (2011) ISI impact factor: 1.061.

[15] **M. Dimian** and P. Andrei, "Noise induced resonance phenomena in stochastically driven hysteretic systems", Journal of Applied Physics vol. 109, no. 07D330 (2011), ISI impact factor: 2.072.

[16] **M. Dimian**, A. Gîndulescu și P. Andrei, "Influence of noise temporal correlation on magnetization spectra and thermal relaxations in soft magnetic materials", IEEE Transactions on Magnetics, vol. 46 (2), pg. 266-269 (2010).

[17] **M. Dimian**, A. Adedoyin, A. Gîndulescu și P. Andrei, "Modeling and simulation of noise induced phenomena in complex hysteretic systems," IEEE Transactions on Magnetics, vol. 45, nr. 11, pp. 5231-5234 (2009), Factor de impact ISI: 1,061.

[18] **M. Dimian**, A Gîndulescu și C. Acholo, "Minimum field requirements for spin-polarized current assisted switching of magnetization in nanostructure with uniaxial anisotropy," Advances in Electrical and Computer Engineering, vol. 9, nr. 1, pg. 3-7 (2009), Factor de impact ISI: 0,501.

[19] **M. Dimian**, E. Coca și V. Popa, Analytical and experimental analysis of noise passage through hysteretic systems, Journal of Applied Physics, vol. 105, no. 7, art. nr. 07D515 (2009), Factor de

impact ISI: 2,072.

[20] **M. Dimian**, “Extracting energy from noise: noise benefits in hysteretic systems,” NANO: Brief reviews and reports, vol. 3, nr. 5, pg. 391-397 (2008), ISI IF: 1,110.

[21] **M. Dimian**, I. Mayergoyz, G. Bertotti şi C. Serpico “Multiple scale analysis of magnetization dynamics driven by external fields” Journal of Applied Physics, vol. 99 (8), art. nr. 08G104 (2006), Factor de impact ISI: 2,316.

[22] **M. Dimian** şi I. Mayergoyz, “Influence of surface anisotropy on magnetization precessional switching in nanoparticles,” Journal of Applied Physics, vol. 97 (10), art. nr. 10J302 (2005), Factor de impact ISI: 2,498.

[23] I. Mayergoyz, **M. Dimian**, G. Bertotti şi C. Serpico, “Inverse problem approach to precessional switching in perpendicular media,” Journal of Applied Physics, vol. 97 (10), art. nr. 10A703 (2005), Factor de impact ISI: 2,498.

[24] **M. Dimian** şi I. Mayergoyz, “Spectral density analysis of nonlinear hysteretic systems,” Physical Review E, vol. 70 (4), art. nr. 046124 (2004), ISI IF: 2,352.

[25] **M. Dimian** şi I. Mayergoyz, “Spectral noise density of the Preisach model,” IEEE Transactions on Magnetics, vol. 40, 4, pg. 2134-36 (2004), ISI IF: 0,837.

[26] I. Mayergoyz, **M. Dimian**, G. Bertotti şi C. Serpico, “Inverse problem approach to the design of magnetic field pulses for precessional switching,” Journal of Applied Physics, vol. 95 (11), pp. 7004-7006 (2004), Factor de impact ISI: 2,255.

[27] P. Andrei, **M. Dimian**, C. Krafft, I. D. Mayergoyz, D. I. Mircea, şi R. Rojas, “Anisotropy characterization of garnet films by using VSM measurements,” Journal of Applied Physics, vol. 93 (10), pp. 7065-7067 (2003), Factor de impact ISI: 2,171.

[28] H. Kachkachi şi **M. Dimian**, “Hysteretic properties of a magnetic particle with strong surface anisotropy,” Physical Review B, vol. 66 (17), art. nr. 174419, Nr. Pag. 11 (2002), Factor de impact ISI: 3,075.

Date,
4.10.2018

Signature,