

Universitatea Howard, Washington DC (2008)

Asistent de Cercetare Distins, Universitatea Maryland, College Park, (2002, 2003, 2004)

Alte activități profesionale

Președinte / Vice-Președinte – Comisia de Electronică, Telecomunicații și Nanotehnologii a Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare, Ministerul Educației Naționale (2016 – prezent)

Membru al Colegiului Consultativ pentru Cercetare, Dezvoltare și Inovare, Ministerul Cercetării, Inovării și Digitalizării (2021 – prezent)

Membru al Consiliului National al Cercetarii Stiintifice, Ministerul Cercetării și Inovării (2017 – 2019)

Membru al Consiliului Național de Statistică și Prognoză în Învățământul Superior, Ministerul Educației Naționale (2016 – 2018)

Editor Asociat - Advances in Electrical and Computer Engineering (2009 – prezent), ISI IF = 0.699

Editor Invitat Coordonator – Journal of Advanced Transportation (2018), ISI IF = 1.102, Physica B: Condensed Matter, vol. 486 (2016), ISI IF = 1.453, Journal of Physics: Conference Series, Volume 585 (2015) și Volume 727 (2016), indexed Web of Science

Cărți

[1] **M. 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

[2] **M. Dimian**, "Stochastic Aspects of Hysteresis" (in Romanian), *Mediamira Publisher*, Cluj Napoca, Romania, 170 pages, 2010, ISBN 978-973-713-281-9

[3] **M. Dimian**, "Nonlinear spin dynamics and ultra-fast precessional switching," *ProQuest Information and Learning*, Ann Arbor, U.S.A., 141 pages, 2005, ISBN: 0-542-18364-1

Lucrări în reviste cotate ISI / Clarivate JCR [Selecție]

[1] A. Lobiuc, **M. Dimian**, R. Gheorghită, O. Sturdza, M. Covasa, "Introduction and Characteristics of SARS-CoV-2 in North-East of Romania During the First COVID-19 Outbreak", *Frontiers of Microbiology*, Vol.12, Art. 654417, (2021), ISI Impact Factor 5.640

[2] C. Beguni, A.M. Căilean, S. Avatamanitei, **M. Dimian**, "Analysis and Experimental Investigation of the Light Dimming Effect on Automotive Visible Light Communications Performances", *Sensors*, Vol. 21 (13), Art. 4446 (2021), ISI Impact Factor 3.576.

[3] E. Zadobrischi, **M. Dimian**, „Inter-Urban Analysis of Pedestrian and Drivers through a Vehicular Network Based on Hybrid Communications Embedded in a Portable Car System and Advanced Image Processing Technologies”, *Remote Sensing*, vol, 13 (7), art. 1234 (2021), ISI Impact Factor 4.848

[4] R Gheorghita Puscaselu, A Lobiuc, **M Dimian**, M Covasa, „Alginate: From Food Industry to Biomedical Applications and Management of Metabolic Disorders”, *Polymers*, vol. 12 (10), art. no. 2417, pg. 1-28 (2020), ISI impact factor 3.426

[5] E Zadobrischi, L. Cosovanu, **M Dimian**, „Traffic Flow Density Model and Dynamic Traffic Congestion Model Simulation Based on Practice Case with Vehicle Network and System Traffic Intelligent Communication”, *Symmetry*, vol. 12, art. 1172, pg. 1-19, (2020). ISI 2.645

[6] AM Căilean, **M Dimian**, V Popa, „Noise-adaptive visible light communications receiver for automotive applications: a step toward self-awareness”, *Sensors* vol. 20 (13), art. 3764 (2020), ISI impact factor 3.275

[7] SA Avătămăniței, AM Căilean, A Done, **M Dimian**, V Popa, M. Prelipceanu, „Design and Intensive Experimental Evaluation of an Enhanced Visible Light Communication System for Automotive Applications”, *Sensors* 20 (11), art. 3190 (2020), ISI impact factor 3.275

[8] M Ungureanu-Iuga, **M Dimian**, S Mironeasa, „Development and quality evaluation of gluten-free pasta with grape peels and whey powders”, *Lebensmittel-Wissenschaft & Technologie*, 109714 (2020), ISI impact factor 4.006

[9] **M. Dimian**, A. Căilean, A. Done. S. Vlad, P. Andrei, "Visible light communication sensors with adaptive hysteretic circuits for automotive applications", *Physica B – Condensed Matter*, col. 549, pg. 31-34 (2018), ISI impact factor 1.874

[10] 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 25.248

[11] A. Cailean, **M. Dimian**, "Impact of IEEE 802.15.7 Standard on Visible Light Communications Usage in Automotive Applications", *IEEE Communications Magazine*, 2017, ISI IF: 10.435.

[12] 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: 3,301.

[13] 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: 3,301

[14] 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: 2.43

[15] 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

- [16] A. Cailean, B. Cagneau; L. Chassagne; **M. Dimian**; V. Popa, "Novel Receiver Sensor for Visible Light Communications in Automotive Applications," IEEE Sensors Journal, vol.15, no.8, pp.4632-4639, 2015, ISI Impact factor: 3.301.
- [17] **M. Dimian**, Andrei, P.; Mehta, M.; Idubor, OA, "Thermal relaxation in magnetic multi-layer materials with mixed hysteretic behaviour," Journal of applied physics, vol. 117 (17), art. no.: 17A745, 2015, ISI Impact factor: 2.183
- [18] **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. no. 17D103. ISI Impact factor: 2.21
- [19] 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, ISI Impact Factor: 2.313
- [20] D. Chiruță, J. Linares, Y. Garcia, **M. Dimian**, P.R. Dahoo, "Analysis of multi-step transitions in spin crossover nanochains", Physica B: Condensed Matter, vol. 434, pp. 134-138, 2014. ISI Impact Factor: 2.436.
- [21] P. Andrei, M. Mehta, **M. Dimian**, "Modeling mixed clockwise and counter-clockwise hysteresis in multi-layer materials by using a generalized Jiles-Atherton model", Physica B: Condensed Matter, vol. 435, pg. 156-159, 2014. ISI Impact factor: 2.436.
- [22] D. Chiruță, J. Linares, P.R. Dahoo, **M. Dimian**, "Influence of pressure and interactions strength on hysteretic behavior in two-dimensional polymeric spin crossover compounds", Physica B: Condensed Matter, vol. 435, pg. 76-79, 2014. ISI Impact factor: 2.436
- [23] D. Chiruță, **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.
- [24] 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 IF: 2.313.
- [25] P. Andrei, **M. Dimian**, "Clockwise Jiles-Atherton hysteresis model", IEEE Transactions on Magnetics, 49, 7, 2013, ISI impact Factor: 1.363.
- [26] D. Chiruță, J. Linares, Y. Garcia, P.R Dahoo, **M. Dimian** – "Analysis of 3D Spin Crossover Compounds hysteretic behavior using an Ising like model", European Journal of Inorganic Chemistry 21, 3601-3608, 2013, ISI Impact Factor: 3.12.
- [27] D. Chiruta; J. Linares, **M. Dimian**, et al., "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, 951-957, Feb 2013, ISI impact factor: 3.045
- [28] **M. Dimian**, O. Manu, P. Andrei, "Influence of noise color on stochastic resonance in hysteretic systems" Journal of Applied Physics 111, 07D132 (2012), ISI impact factor: 2.072.
- [29] D. Chiruță, J. Linares, P.R. Dahoo and **M. Dimian** – "Analysis of long-range interaction effects on phase transitions in two-step spin-crossover chains by using Ising-type systems and Monte Carlo entropic sampling technique", Journal of Applied Physics, vol. 112, art. no. 074906, pg. 1-7 (2012), ISI impact factor: 2.072.
- [30] A. Gindulescu, A. Rotaru, J. Linares, **M. Dimian**, J. Nasser, "Metastable states at low temperature in spin crossover compounds in the framework of the atom-phonon coupling model", Polyhedron, vol. 30, issue: 18, pg.: 3186-3188 (2011), ISI impact factor: 2.067
- [31] **M. Dimian**, P. Andrei, O. Manu, V. Popa, "Comparison of Noise-Induced Resonance Characteristics for Different Models of Hysteresis," IEEE Transactions on Magnetics, Vol. 47, Issue: 10, pg. 3825-3828 (2011) ISI impact factor: 1.467
- [32] **M. Dimian**, P. Andrei, "Noise induced resonance phenomena in stochastically driven hysteretic systems," Journal of Applied Physics, Vol. 109 (7), Art. No. 07D330 (2011) ISI impact factor: 2.176
- [33] M. Paez Espejo, A. Gîndulescu, J. Linares, J. Nassser, and **M. Dimian**, "Phase diagram of 2D spin crossover systems using the atom – phonon coupling model", Journal of Applied Physics, vol. 109, no. 07B102 (2011), ISI impact factor: 2.072
- [34] **M. Dimian**, A. Gîndulescu, and 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), ISI impact factor: 1.061.
- [35] **M. Dimian**, A. Adedoyin, A. Gîndulescu, P. Andrei "Modeling and simulation of noise induced phenomena in complex hysteretic systems," IEEE Transactions on Magnetics, vol. 45, no. 11, pg. 5231-5234 (2009); ISI impact factor: 1.061.
- [36] **M. Dimian**, E. Coca, V. Popa, Analytical and experimental analysis of noise passage through hysteretic systems, Journal of Applied Physics, vol. 105, no. 7, art. no. 07D515 (2009), ISI impact factor: 2.072.
- [37] **M. Dimian**, "Extracting energy from noise: noise benefits in hysteretic systems," NANO, vol. 3, no. 5, pp. 391-397 (2008), ISI impact factor: 1.1.
- [38] **M. Dimian**, I. Mayergoyz, G. Bertotti, si C. Serpico "Multiple scale analysis of magnetization dynamics driven by external fields" Journal of Applied Physics, vol. 99 (8), art. nr. 08G104 (2006), ISI impact factor: 2.316.

[39] **M. Dimian**, I. Mayergoyz, "Influence of surface anisotropy on magnetization precessional switching in nanoparticles," Journal of Applied Physics, vol. 97 (10), art. nr. 10J302 (2005), ISI impact factor: 2.316

[40] **M. Dimian**, I. Mayergoyz, "Spectral density analysis of nonlinear hysteretic systems," Physical Review E, vol. 70 (4), art. nr. 046124 (2004), ISI impact factor: 2.352

Brevete (selecție)

[1] A. Cailean, **M Dimian**, A. Done, E.D. Olariu, L.N. Cojocariu, "Smart traffic lights with data transmission capacity" IPC: G08G1/095, Publication info: RO132689 (A0), 2018, Priority date: 28.11.2017, număr brevet: RO132689B1

[2] E. Olariu, **M. Dimian**, M. Prelipceanu, "Solar actuator," IPC F03G6/00, F24J2/54, Publication info: RO131745 (A2), 2017, Priority date: 24.09.2015, Hotărâre acordare brevet 4/282/31.12.2020

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