

Stoleriu Laurențiu	
Title	Professor
Scientific title	Doctor habilitatus / 2014 Doctor in physics / 2002 / Alexandru Ioan Cuza University of Iași
Main research interests	Hysteretic processes Micromagnetism Spintronics
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Birth place and date	Iași, 02/06/1972
Present workplace	Alexandru Ioan Cuza University of Iași
Didactic activity	- Books: - L. Stoleriu, Al. Stancu, „Modelarea și simularea proceselor fizice”, Ed. TEHNOPRESS, Iași, 2007 - A. Stancu, L. Stoleriu, „Preisach Modeling and FORC characterization for hysteretic phenomena in ferroics”, in „New developments in advanced functional ceramics”, Transworld Research Network, pp. 267-292, 2007 - A. Stancu, L. Stoleriu, M. Cerchez, D. Cimpoesu, P. Postolache, R. Tanasa „The Preisach Model for Patterned Media” in „Preisach memorial book”, Akadémiai Kiadó, Budapest, pp. 143-153, 2005
Scientific Research	<p>a) Domains / number of papers Physical processes with hysteresis, experimental and numerical methods of studying these processes in bulk and thin film materials, as well as in ordered or random nanostructured (nanowires, nanodots, antidots). Numerical micromagnetism and other numerical applications on high performance computing architectures (HPC, parallel programming, numerical calculus on graphical processors).</p> <p>85 ISI papers / 37 ISI impact points (personal impact factor)</p> <p>b) Publications (some of the most important recent papers). - Stoleriu, L; Nishino, M; Miyashita, S; Hauser, A; Stancu, A; Enachescu. C, Cluster evolution in molecular three-dimensional spin-crossover systems, PHYSICAL REVIEW B Vol: 96(6), Art No: 064115, 2017 - Bertoni, R; Lorenc, M; Cailleau, H; Tissot, A; Laisney, J; Boillot, ML; Stoleriu, L; Stancu, A; Enachescu, C; Collet, E, Elastically driven cooperative response of a molecular material impacted by a laser pulse, NATURE MATERIALS, Vol.: 15(6), p. 606, 2016 - Enachescu, C; Stoleriu, L; Stancu, A; Hauser, A, Model for Elastic Relaxation Phenomena in Finite 2D Hexagonal Molecular Lattices, PHYSICAL REVIEW LETTERS, Vol.: 102(25), Art.: 257204, 2009. - Stoleriu, L; Stancu, A; Mitoseriu, L; Piazza, D; Galassi, C, Analysis of the switching properties of porous ferroelectric ceramics by means of the FORC diagrams, PHYSICAL REVIEW B, Vol 99(8), Art.: 08D702, 2006. - Stoleriu, L; Andrei, P; Stancu, A, First order reversal curves identification procedures for vector models of hysteresis, JOURNAL OF APPLIED PHYSICS, Vol.: 103(7), Art.: 07D923, 2008. - Stancu, A; Andrei, P; Stoleriu, L; Magnetic characterization of samples using first- and second-order reversal curve diagrams, JOURNAL OF APPLIED PHYSICS, 99(8): Art. No. 08D702. 2006,</p> <p>c) Scientific research grants - Member in a FP6 team: - MAGMANET (MOLECULAR APPROACH TO NANOMAGNETS AND MULTIFUNCTIONAL MATERIALS), Network of Excellence - Director: - High performance computing of advanced magnetic structures designed for</p>

	<p>tomorrow's memories and sensors, CNCS TE, 750.000 RON, 2012-2014</p> <ul style="list-style-type: none"> - Fast switching study (toggle switching) of nanometric systems magnetic moments with applications to modern recording media, CNCSIS AT, 100.000 RON, 2007 - Experimental and theoretical study of physical processes with hysteresis in ferromagnetic, ferroelectric and spin transition materials, MEdC-ANCS CEEExtineri, 130.000 RON, 2005-2007 <p>- Member in the research team of 28 other research grants.</p> <p>d) ISI citations (excluding self-citations) >1150 ISI citations</p>
Recent invited and oral talks	<ul style="list-style-type: none"> - L. Stoleriu, C. Pinzaru, A. Stancu, "Micromagnetic analysis of mechanical stress effect on magnetic fomain structure of amorphous wires", FC03, Interomag Conference, 2012, Vancouver, Canada. - L. Stoleriu, C. Enăchescu, "Study of cluster evolution in 3D spin crossover compounds in the framework of an elastic model", EcostBio Meeting, 2015, Belgrade, Serbia. - L. Stoleriu, A. Stancu, "Micromagnetic and FORC analysis of antidot ferromagnetic arrays", Advances in Magnetism Conference, 2016, Bormio, Italy. - L. Stoleriu, A. Stancu, C. Enăchescu, "Modeling spin crossover compounds – from quasistatic hysteresis to femtosecond elastic response" (invited), TIM Conference, 2016, Timișoara, Romania. - L. Stoleriu, A. Stancu, C. Enăchescu, "The mechano-elastic model for spin crossover compounds" (invited), CNFA Conference, 2016, Iași, Romania
Other academic activities	<ul style="list-style-type: none"> - IEEE Senior Member and Secretary of IEEE Magnetism Society, Romania Chapter. - Member of the organizing committee and of the scientific committee of the 10-th International Symposium on Hysteresis Modeling and Micromagnetism (2015). - Reviewer for journals in magnetism like: "IEEE Transaction on Magnetism", "Journal of Magnetism and Magnetic Materials", "Applied Physics Letters", "Physical Review B" etc..

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