



R A P O R T

DE AUTOEVALUARE A ACTIVITĂȚII

ȘCOLII DOCTORALE

A

FACULTĂȚII DE FIZICĂ

UNIVERSITATEA

“ALEXANDRU IOAN CUZA” DIN IAȘI

2011 - 2016

**LISTA CONDUCĂTORILOR DE DOCTORAT**

1	prof. univ. dr. Maricel AGOP
2	prof. univ. dr. Octav BALTAG
3	prof. univ. dr. Ovidiu – Florin CĂLȚUN
4	prof. univ. dr. Ciprian DARIESCU
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14	prof. univ. dr. Alexandru STANCU
15	C S I dr. Horia CHIRIAC (membru in Consiliul Scolii Doctorale)
16	prof. univ. dr. hab. Liviu LEONTIE
17	prof. univ. dr. hab. Lucel SÎRGHI
18	conf. univ. dr. hab. Cristian ENĂCHESCU
19	conf. univ. dr. hab. Laurențiu STOLERIU



Articole publicate în reviste de specialitate cotate în sistemul ISI în perioada 2011-2016

Prof. dr. ALEXANDRU STANCU

Record 1 of 150

Title: Matrix-assisted relaxation in Fe(phen)(2)(NCS)(2) spin-crossover microparticles, experimental and theoretical investigations

Author(s): Enachescu, C (Enachescu, Cristian); Tanasa, R (Tanasa, Radu); Stancu, A (Stancu, Alexandru); Tissot, A (Tissot, Antoine); Laisney, J (Laisney, Jerome); Boillot, ML (Boillot, Marie-Laure)

Source: APPLIED PHYSICS LETTERS Volume: 109 Issue: 3 Article Number: 031908 DOI: 10.1063/1.4959262 Published: JUL 18 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 2 of 150

Title: Elastically driven cooperative response of a molecular material impacted by a laser pulse

Author(s): Bertoni, R (Bertoni, Roman); Lorenc, M (Lorenc, Maciej); Cailleau, H (Cailleau, Herve); Tissot, A (Tissot, Antoine); Laisney, J (Laisney, Jerome); Boillot, ML (Boillot, Marie-Laure); Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru); Enachescu, C (Enachescu, Cristian); Collet, E (Collet, Eric)

Source: NATURE MATERIALS Volume: 15 Issue: 6 Pages: 606-+ DOI: 10.1038/NMAT4606 Published: JUN 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 3 of 150

Title: FORC diagram study of magnetostatic interactions in 2D longitudinal arrays of magnetic wires

Author(s): **Nica, M (Nica, Mihai)**; Stancu, A (Stancu, Alexandru)

Source: PHYSICA B-CONDENSED MATTER Volume: 475 Pages: 73-79 DOI: 10.1016/j.physb.2015.07.001 Published: OCT 15 2015

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 4 of 150

Title: Kinetic effects on double hysteresis in spin crossover molecular magnets analyzed with first order reversal curve diagram technique



Author(s): Stan, RM (Stan, Raluca-Maria); Gaina, R (Gaina, Roxana); Enachescu, C (Enachescu, Cristian); Tanasa, R (Tanasa, Radu); Stancu, A (Stancu, Alexandru); Bronisz, R (Bronisz, Robert)

Source: JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 17 Article Number: 17B323

DOI: 10.1063/1.4918961 Published: MAY 7 2015

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 5 of 150

Title: Analysis of first order reversal curves in the thermal hysteresis of spin-crossover nanoparticles within the mechanoelastic model

Author(s): Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru); Chakraborty, P (Chakraborty, Pradip); Hauser, A (Hauser, Andreas); Enachescu, C (Enachescu, Cristian)

Source: JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 17 Article Number: 17B307

DOI: 10.1063/1.4914953 Published: MAY 7 2015

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 6 of 150

Title: Tracking the individual magnetic wires' switchings in ferromagnetic nanowire arrays using the first-order reversal curves (FORC) diagram method

Author(s): **Dobrota, CI (Dobrota, Costin-Ionut)**; Stancu, A (Stancu, Alexandru)

Source: PHYSICA B-CONDENSED MATTER Volume: 457 Pages: 280-286 DOI: 10.1016/j.physb.2014.10.006 Published: JAN 15 2015

Times Cited in Web of Science Core Collection: 8

Total Times Cited: 8

Record 7 of 150

Title: Study of spin crossover nanoparticles thermal hysteresis using FORC diagrams on an Ising-like model

Author(s): Atitoaie, A (Atitoaie, Alexandru); Tanasa, R (Tanasa, Radu); Stancu, A (Stancu, Alexandru); Enachescu, C (Enachescu, Cristian)

Source: JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 368 Pages: 12-18 DOI: 10.1016/j.jmmm.2014.04.054 Published: NOV 2014

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Record 8 of 150

Title: Micromagnetic Evaluation of Size Effects on the Critical Curves of Synthetic Antiferromagnetic Structures

Author(s): **Pinzaru, C (Pinzaru, Ciprian)**; Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru)

Source: IEEE TRANSACTIONS ON MAGNETICS Volume: 50 Issue: 7 Article Number: 7100405 DOI: 10.1109/TMAG.2014.2304916 Part: 2 Published: JUL 2014

Times Cited in Web of Science Core Collection: 0



Total Times Cited: 0

Record 9 of 150

Title: Oscillation synchronization in a linear chain of interacting single-domain ferromagnetic particles

Author(s): **Lungu, AC (Lungu, Alin-Cristian)**; Stancu, A (Stancu, Alexandru)

Source: PHYSICA B-CONDENSED MATTER Volume: 444 Pages: 106-114 DOI: 10.1016/j.physb.2014.03.058 Published: JUL 1 2014

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 10 of 150

Title: Effect of damping on the laser induced ultrafast switching in rare earth-transition metal alloys

Author(s): **Oniciuc, E (Oniciuc, Eugen)**; Stoleriu, L (Stoleriu, Laurentiu); Cimpoesu, D (Cimpoesu, Dorin); Stancu, A (Stancu, Alexandru)

Source: APPLIED PHYSICS LETTERS Volume: 104 Issue: 22 Article Number: 222404 DOI: 10.1063/1.4881135 Published: JUN 2 2014

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 11 of 150

Title: Controlling temperature in magnetic hyperthermia with low Curie temperature particles

Author(s): Astefanoaei, I (Astefanoaei, Iordana); Dumitru, I (Dumitru, Ioan); Chiriac, H (Chiriac, Horia); Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF APPLIED PHYSICS Volume: 115 Issue: 17 Article Number: 17B531 DOI: 10.1063/1.4868709 Published: MAY 7 2014

Times Cited in Web of Science Core Collection: 4

Total Times Cited: 4

Record 12 of 150

Title: A thermo-fluid analysis in magnetic hyperthermia

Author(s): Astefanoaei, I (Astefanoaei, Iordana); Dumitru, I (Dumitru, Ioan); Stancu, A (Stancu, Alexandru); Chiriac, H (Chiriac, Horia)

Source: CHINESE PHYSICS B Volume: 23 Issue: 4 Article Number: 044401 DOI: 10.1088/1674-1056/23/4/044401 Published: APR 2014

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 13 of 150

Title: LLB simulation of the temperature dependent switching critical curve of a Stoner-Wohlfarth macrospin in the presence of a polarized current

Author(s): **Oniciuc, E (Oniciuc, E.)**; Stoleriu, L (Stoleriu, L.); Stancu, A (Stancu, A.)

Source: JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 352 Pages: 99-106 DOI: 10.1010/j.jmmm.2013.10.001 Published: FEB 2014



Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 14 of 150

Title: Hysteretic behavior of Fe(phen)(2)(NCS)(2) spin-transition microparticles vs. the environment: A huge reversible component resolved by first order reversal curves

Author(s): Tanasa, R (Tanasa, Radu); Laisney, J (Laisney, Jerome); Stancu, A (Stancu, Alexandru); Boillot, ML (Boillot, Marie-Laure); Enachescu, C (Enachescu, Cristian)

Source: APPLIED PHYSICS LETTERS Volume: 104 Issue: 3 Article Number: 031909 DOI: 10.1063/1.4862748 Published: JAN 20 2014

Times Cited in Web of Science Core Collection: 9

Total Times Cited: 9

Record 15 of 150

Title: Generalized Stoner-Wohlfarth model accurately describing the switching processes in pseudo-single ferromagnetic particles

Author(s): Cimpoesu, D (Cimpoesu, Dorin); Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 22 Article Number: 223901 DOI: 10.1063/1.4839895 Published: DEC 14 2013

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 3

Record 16 of 150

Title: Magnetization reversal in triangular L1(0)-FePt nanoislands

Author(s): Markou, A (Markou, A.); Beltsios, KG (Beltsios, K. G.); Gergidis, LN (Gergidis, L. N.); Panagiotopoulos, I (Panagiotopoulos, I.); Bakas, T (Bakas, T.); Ellinas, K (Ellinas, K.); Tserapi, A (Tserapi, A.); Stoleriu, L (Stoleriu, L.); Tanasa, R (Tanasa, R.); Stancu, A (Stancu, A.)

Source: JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 344 Pages: 224-229 DOI: 10.1016/j.jmmm.2013.06.009 Published: OCT 2013

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Record 17 of 150

Title: Reversible Magnetization Processes Evaluation Using High-Order Magnetization Curves

Author(s): **Bodale, I (Bodale, Ilie)**; Stancu, A (Stancu, Alexandru)

Source: IEEE TRANSACTIONS ON MAGNETICS Volume: 49 Issue: 9 Pages: 4960-4964 DOI: 10.1109/TMAG.2013.2259181 Published: SEP 2013

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 18 of 150

Title: Angular resonant absorption curves in magnetic nanowire arrays



Author(s): Cimpoesu, D (Cimpoesu, Dorin); Ding, JJ (Ding, Junjia); Stoleriu, L (Stoleriu, Laurentiu); Adeyeye, A (Adeyeye, Adekunle); Stancu, A (Stancu, Alexandru); Spinu, L (Spinu, Leonard)

Source: APPLIED PHYSICS LETTERS Volume: 102 Issue: 23 Article Number: 232401

DOI: 10.1063/1.4810758 Published: JUN 10 2013

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 19 of 150

Title: Linear/Nonlinear Regime Limit in AC/DC Magnetic Field Measurements

Author(s): **Lungu, AC (Lungu, Alin Cristian)**; Stancu, A (Stancu, Alexandru)

Source: IEEE TRANSACTIONS ON MAGNETICS Volume: 49 Issue: 6 Pages: 2858-2864

DOI: 10.1109/TMAG.2012.2237410 Part: 2 Published: JUN 2013

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Record 20 of 150

Title: Physical study of the Cucuteni pottery technology

Author(s): Matau, F (Matau, Florica); Nica, V (Nica, Valentin); Postolache, P (Postolache, Petronel); **Ursachi, I (Ursachi, Irina)**; Cotiuga, V (Cotiuga, Vasile); Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF ARCHAEOLOGICAL SCIENCE Volume: 40 Issue: 2 Pages: 914-925

DOI: 10.1016/j.jas.2012.08.021 Published: FEB 2013

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 4

Record 21 of 150

Title: What does a first-order reversal curve diagram really mean? A study case: Array of ferromagnetic nanowires

Author(s): **Dobrota, CI (Dobrota, Costin-Ionut)**; Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF APPLIED PHYSICS Volume: 113 Issue: 4 Article Number: 043928

DOI: 10.1063/1.4789613 Published: JAN 28 2013

Times Cited in Web of Science Core Collection: 29

Total Times Cited: 29

Record 22 of 150

Title: Mean field model for ferromagnetic nanowire arrays based on a mechanical analogy

Author(s): **Dobrota, CI (Dobrota, Costin-Ionut)**; Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 25 Issue: 3 Article Number: 035302 DOI: 10.1088/0953-8984/25/3/035302 Published: JAN 23 2013

Times Cited in Web of Science Core Collection: 7

Total Times Cited: 7

Record 23 of 150

Title: Dynamic phase transitions in the one-dimensional spin-phonon coupling model



Author(s): Apetrei, AM (Apetrei, Alin Marian); Boukheddaden, K (Boukheddaden, Kamel); Stancu, A (Stancu, Alexandru)

Source: PHYSICAL REVIEW B Volume: 87 Issue: 1 Article Number: 014302 DOI: 10.1103/PhysRevB.87.014302 Published: JAN 17 2013

Times Cited in Web of Science Core Collection: 4

Total Times Cited: 4

Record 24 of 150

Title: Landau-Lifshitz-Bloch-Slonczewski simulations of the spin-transfer-torque driven magnetization switching assisted by Joule heating

Author(s): **Oniciuc, E (Oniciuc, Eugen)**; Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru)

Source: APPLIED PHYSICS LETTERS Volume: 102 Issue: 2 Article Number: 022405 DOI: 10.1063/1.4775682 Published: JAN 14 2013

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 25 of 150

Title: PKP simulation of size effect on interaction field distribution in highly ordered ferromagnetic nanowire arrays

Author(s): **Dobrota, CI (Dobrota, Costin-Ionut)**; Stancu, A (Stancu, Alexandru)

Source: PHYSICA B-CONDENSED MATTER Volume: 407 Issue: 24 Pages: 4676-4685 DOI: 10.1016/j.physb.2012.08.041 Published: DEC 15 2012

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Record 26 of 150

Title: Monte Carlo Metropolis study of cluster evolution in spin-crossover solids within the framework of a mechanoelastic model

Author(s): Enachescu, C (Enachescu, Cristian); Nishino, M (Nishino, Masamichi); Miyashita, S (Miyashita, Seiji); Stoleriu, L (Stoleriu, Laurentiu); Stancu, A (Stancu, Alexandru)

Source: PHYSICAL REVIEW B Volume: 86 Issue: 5 Article Number: 054114 DOI: 10.1103/PhysRevB.86.054114 Published: AUG 20 2012

Times Cited in Web of Science Core Collection: 17

Total Times Cited: 17

Record 27 of 150

Title: Magnetic alpha-Fe₂O₃/MCM-41 nanocomposites: Preparation, characterization, and catalytic activity for methylene blue degradation

Author(s): **Ursachi, I (Ursachi, Irina)**; Stancu, A (Stancu, Alexandru); Vasile, A (Vasile, Aurelia)

Source: JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 377 Pages: 184-190 DOI: 10.1016/j.jcis.2012.03.066 Published: JUL 1 2012

Times Cited in Web of Science Core Collection: 20

Total Times Cited: 20



Record 28 of 150

Title: Micromagnetic analysis of switching and domain structure in amorphous metallic nanowires

Author(s): Stoleriu, L (Stoleriu, Laurentiu); **Pinzaru, C (Pinzaru, Ciprian)**; Stancu, A (Stancu, Alexandru)

Source: APPLIED PHYSICS LETTERS Volume: 100 Issue: 12 Article Number: 122404

DOI: 10.1063/1.3696046 Published: MAR 19 2012

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Record 29 of 150

Title: PVC/Fe electrospun nanofibers for high frequency applications

Author(s): **Chiscan, O (Chiscan, Ovidiu)**; Dumitru, I (Dumitru, Ioan); Tura, V (Tura, Vasile); Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF MATERIALS SCIENCE Volume: 47 Issue: 5 Pages: 2322-2327 DOI:

10.1007/s10853-011-6047-x Published: MAR 2012

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Record 30 of 150

Title: Experimental and Micromagnetic First-Order Reversal Curves Analysis in [Ni-Fe/Zn/Co-Ni-N/Ni-Mn] Spin Valves

Author(s): Pascariu, P (Pascariu, P.); Postolache, P (Postolache, P.); Stancu, A (Stancu, A.); Georgescu, V (Georgescu, V.)

Source: JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 25

Issue: 2 Pages: 481-486 DOI: 10.1007/s10948-011-1304-4 Published: FEB 2012

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 1

Record 31 of 150

Title: Electrospun PVC/Fe₃O₄ composite nanofibers for microwave absorption applications

Author(s): **Chiscan, O (Chiscan, Ovidiu)**; Dumitru, I (Dumitru, Ioan); Postolache, P (Postolache, Petronel); Tura, V (Tura, Vasile); Stancu, A (Stancu, Alexandru)

Source: MATERIALS LETTERS Volume: 68 Pages: 251-254 DOI:

10.1016/j.matlet.2011.10.084 Published: FEB 1 2012

Times Cited in Web of Science Core Collection: 8

Total Times Cited: 8

Record 32 of 150

Title: Asymmetries influence on critical curves of the synthetic antiferromagnetic structures in magnetic random access memory

Author(s): **Petrila, I (Petrila, Iulian)**; Stancu, A (Stancu, Alexandru)

Source: COMPUTATIONAL MATERIALS SCIENCE Volume: 51 Issue: 1 Pages: 122-126

DOI: 10.1016/j.commatsci.2011.07.020 Published: JAN 2012



Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Record 33 of 150

Title: Magnetic properties of magnetite nanoparticles coated with mesoporous silica by sonochemical method

Author(s): **Ursachi, I (Ursachi, Irina)**; Vasile, A (Vasile, Aurelia); Chiriac, H (Chiriac, Horia); Postolache, P (Postolache, Petronel); Stancu, A (Stancu, Alexandru)

Source: MATERIALS RESEARCH BULLETIN Volume: 46 Issue: 12 Pages: 2468-2473

DOI: 10.1016/j.materresbull.2011.08.033 Published: DEC 2011

Times Cited in Web of Science Core Collection: 12

Total Times Cited: 12

Record 34 of 150

Title: Size effect in spin-crossover systems investigated by FORC measurements, for surfacted [Fe(NH₂-trz)(3)](Br)(2)center dot 3H(2)O nanoparticles: reversible contributions and critical size

Author(s): Rotaru, A (Rotaru, A.); Varret, F (Varret, F.); Gindulescu, A (Gindulescu, A.); Linares, J (Linares, J.); Stancu, A (Stancu, A.); Letard, JF (Letard, J. F.); Forestier, T (Forestier, T.); Etrillard, C (Etrillard, C.)

Source: EUROPEAN PHYSICAL JOURNAL B Volume: 84 Issue: 3 Pages: 439-449 DOI: 10.1140/epjb/e2011-10903-x Published: DEC 2011

Times Cited in Web of Science Core Collection: 29

Total Times Cited: 29

Record 35 of 150

Title: Ultrasonic-assisted synthesis and magnetic studies of iron oxide/MCM-41 nanocomposite

Author(s): **Ursachi, I (Ursachi, Irina)**; Vasile, A (Vasile, Aurelia); Ianculescu, A (Ianculescu, Adelina); Vasile, E (Vasile, Eugeniu); Stancu, A (Stancu, Alexandru)

Source: MATERIALS CHEMISTRY AND PHYSICS Volume: 130 Issue: 3 Pages: 1251-1259

DOI: 10.1016/j.matchemphys.2011.09.004 Published: NOV 1 2011

Times Cited in Web of Science Core Collection: 16

Total Times Cited: 19

Record 36 of 150

Title: High Frequency Absorption of PVC/Iron Oxides and PVC/CoFe₂O₄/CoO Nanofibers Produced by Electrospinning Technique

Author(s): **Chiscan, O (Chiscan, Ovidiu)**; Dumitru, I (Dumitru, Ioan); Tura, V (Tura, Vasile); Chiriac, H (Chiriac, Horia); Stancu, A (Stancu, Alexandru)

Source: IEEE TRANSACTIONS ON MAGNETICS Volume: 47 Issue: 11 Pages: 4511-4516

DOI: 10.1109/TMAG.2011.2158109 Published: NOV 2011

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Record 37 of 150



Title: Deterministic and non-deterministic switching in chains of magnetic hysteron

Author(s): Tanasa, R (Tanasa, R.); Stancu, A (Stancu, A.)

Source: JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 23 Issue: 42 Article Number: 426002 DOI: 10.1088/0953-8984/23/42/426002 Published: OCT 26 2011

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Record 38 of 150

Title: Interactions and reversal-field memory in complex magnetic nanowire arrays

Author(s): Rotaru, A (Rotaru, Aurelian); Lim, JH (Lim, Jin-Hee); Lenormand, D (Lenormand, Denny); Diaconu, A (Diaconu, Andrei); Wiley, JB (Wiley, John. B.); Postolache, P (Postolache, Petronel); Stancu, A (Stancu, Alexandru); Spinu, L (Spinu, Leonard)

Source: PHYSICAL REVIEW B Volume: 84 Issue: 13 Article Number: 134431 DOI: 10.1103/PhysRevB.84.134431 Published: OCT 20 2011

Times Cited in Web of Science Core Collection: 21

Total Times Cited: 21

Record 39 of 150

Title: Thermal hysteresis in spin-crossover compounds studied within the mechanoelastic model and its potential application to nanoparticles

Author(s): Stoleriu, L (Stoleriu, Laurentiu); Chakraborty, P (Chakraborty, Pradip); Hauser, A (Hauser, Andreas); Stancu, A (Stancu, Alexandru); Enachescu, C (Enachescu, Cristian)

Source: PHYSICAL REVIEW B Volume: 84 Issue: 13 Article Number: 134102 DOI: 10.1103/PhysRevB.84.134102 Published: OCT 11 2011

Times Cited in Web of Science Core Collection: 35

Total Times Cited: 35

Record 40 of 150

Title: Dynamic and temperature effects in microwave assisted switching: Evidence of chaotic macrospin dynamics

Author(s): Cimpoesu, D (Cimpoesu, Dorin); Stancu, A (Stancu, Alexandru)

Source: APPLIED PHYSICS LETTERS Volume: 99 Issue: 13 Article Number: 132503 DOI: 10.1063/1.3640230 Published: SEP 26 2011

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Record 41 of 150

Title: Linear and non-linear energy barriers in systems of interacting single-domain ferromagnetic particles

Author(s): **Petrila, I (Petrila, Iulian); Bodale, I (Bodale, Ilie); Rotarescu, C (Rotarescu, Cristian);** Stancu, A (Stancu, Alexandru)

Source: PHYSICS LETTERS A Volume: 375 Issue: 39 Pages: 3478-3482 DOI: 10.1016/j.physleta.2011.08.007 Published: SEP 12 2011

Times Cited in Web of Science Core Collection: 8

Total Times Cited: 8



Record 42 of 150

Title: Analytical description of a system of two interacting identical uniaxial ferromagnetic particles

Author(s): **Petrila, I (Petrila, Iulian)**; Stancu, A (Stancu, Alexandru)

Source: JOURNAL OF APPLIED PHYSICS Volume: 110 Issue: 4 Article Number: 043923

DOI: 10.1063/1.3626465 Published: AUG 15 2011

Times Cited in Web of Science Core Collection: 6

Total Times Cited: 6

Record 43 of 150

Title: Pressure effect investigated with first-order reversal-curve method on the spin-transition compounds $[\text{Fe}_x\text{Zn}_{1-x}(\text{btr})_2(\text{NCS})_2] \cdot \text{H}_2\text{O}$ ($x=0.6,1$)

Author(s): Rotaru, A (Rotaru, Aurelian); Linares, J (Linares, Jorge); Varret, F (Varret, Francois); Codjovi, E (Codjovi, Epiphane); Slimani, A (Slimani, Ahmed); Tanasa, R (Tanasa, Radu); Enachescu, C (Enachescu, Cristian); Stancu, A (Stancu, Alexandru); Haasnoot, J (Haasnoot, Jaap)

Source: PHYSICAL REVIEW B Volume: 83 Issue: 22 Article Number: 224107 DOI: 10.1103/PhysRevB.83.224107 Published: JUN 23 2011

Times Cited in Web of Science Core Collection: 15

Total Times Cited: 15

Record 44 of 150

Title: Magnetization reversal in $[\text{Ni}/\text{Pt}](6)/\text{Pt}(x)/[\text{Co}/\text{Pt}](6)$ multilayers

Author(s): Siadou, N (Siadou, N.); Androustopoulos, M (Androustopoulos, M.); Panagiotopoulos, I (Panagiotopoulos, I.); Stoleriu, L (Stoleriu, L.); Stancu, A (Stancu, A.); Bakas, T (Bakas, T.); Alexandrakis, V (Alexandrakis, V.)

Source: JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 323 Issue: 12 Pages: 1671-1677 DOI: 10.1016/j.jmmm.2011.01.035 Published: JUN 2011

Times Cited in Web of Science Core Collection: 7

Total Times Cited: 7

Record 45 of 150

Title: Cluster analysis of an Ising-Preisach interacting particle system

Author(s): **Rotarescu, C (Rotarescu, Cristian)**; **Petrila, I (Petrila, Iulian)**; Stancu, A (Stancu, Alexandru)

Source: PHYSICA B-CONDENSED MATTER Volume: 406 Issue: 11 Pages: 2177-2181 DOI: 10.1016/j.physb.2011.03.026 Published: MAY 15 2011

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Record 46 of 150

Title: Analytical ferromagnetic hysteresis with various anisotropies

Author(s): **Petrila, I (Petrila, Iulian)**; Stancu, A (Stancu, Alexandru)



Source: JOURNAL OF APPLIED PHYSICS Volume: 109 Issue: 8 Article Number: 083937
DOI: 10.1063/1.3579447 Published: APR 15 2011
Times Cited in Web of Science Core Collection: 7
Total Times Cited: 7

Record 47 of 150

Title: Thermally activated transitions in a system of two single domain ferromagnetic particles
Author(s): Cimpoesu, D (Cimpoesu, Dorin); Stancu, A (Stancu, Alexandru); Klik, I (Klik, Ivo); Chang, CR (Chang, Ching-Ray); Spinu, L (Spinu, Leonard)
Source: JOURNAL OF APPLIED PHYSICS Volume: 109 Issue: 7 Article Number: 07D339
DOI: 10.1063/1.3562884 Published: APR 1 2011
Times Cited in Web of Science Core Collection: 2
Total Times Cited: 2

Record 48 of 150

Title: Study of the relaxation in diluted spin crossover molecular magnets in the framework of the mechano-elastic model
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Author(s): Pavel, M (Pavel, Mariana); Tanasa, R (Tanasa, Radu); Stancu, A (Stancu, Alexandru)
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Author(s): **Petrila, I (Petrila, Iulian); Stancu, A (Stancu, Alexandru)**
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Author(s): **Petrila, I (Petrila, Iulian)**; Stancu, A (Stancu, Alexandru)

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1. Iuliana Caraman, Liliana Dmitroglou, Igor Evtodiev, **Liviu Leontie**, Dumitru Untila, Saad Hamzaoui, Mokhtar Zerdali, **Oana** □**u**□**u**, Georgiana Bulai, Silviu Gurlui

Optical properties of ZnO thin films obtained by heat treatment of Zn thin films on amorphous SiO₂ substrates and single crystalline GaSe lamellas*Thin Solid Films*, In Press, Available online 15 January 2016

DOI:10.1016/j.tsf.2016.01.027

(2015 E-MRS Spring Meeting and Exhibit, Lille (France), May 11 – 15, 2015, SYMPOSIUM M: Multifunctional binary and complex oxides films and nanostructures for nanoelectronics and energy applications-II)

2. Cazacu, M. M., Tudose, O. G., Timofte, A., **Rusu, O.**, Apostol, L., **Leontie, L.**, Gurlui, S.

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Electric Conduction Mechanism of Some Heterocyclic Compounds, 4,4 - Bipyridine and Indolizine Derivatives in Thin Films

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List of published papers, indexed journals with no IF, 2013–2016

1. M. Caraman, D. Untila, V. Canțer, Ig. Evtodiev, Iu. Caraman, **O. Susu, L. Leontie**

Fabrication and Optical Properties of Lamellar GaSe-ZnSe Nanocomposites

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Conf. dr. habil. STOLERIU LAURENTIU

1. Elastically driven cooperative response of a molecular material impacted by a laser pulse

By: Bertoni, Roman; Lorenc, Maciej; Cailleau, Herve; Tissot, Antoine; Laisney, Jerome; Boillot, Marie-Laure; Stoleriu, Laurentiu; Stancu, Alexandru; Enachescu, Cristian; Collet, Eric

NATURE MATERIALS Volume: 15 Issue: 6 Pages: 606-610 Published: JUN 2016

2. Structural, optical and magnetic properties of Ni doped SnO₂ nanoparticles

By: Pascariu (Dorneanu), Petronela; Airinei, Anton; Grigoras, Mircea; Fifere, Nicusor; Sacarescu, Liviu; Lupu, Nicoleta; Stoleriu, Laurentiu

JOURNAL OF ALLOYS AND COMPOUNDS Volume: 668 Pages: 65-72 Published: MAY 25 2016

3. Shape anisotropy in zero-magnetostrictive rapidly solidified amorphous nanowires



By: Rotarescu, C.; Atitoaie, A.; Stoleriu, L.; Ovari, T-A; Lupu, N.; Chiriac, H.

Conference: 10th International Symposium on Hysteresis Modeling and Micromagnetics (HMM)

Location: Alexandru Ioan Cuza Univ, Iasi, ROMANIA Date: MAY 18-20, 2015

PHYSICA B-CONDENSED MATTER Volume: 486 Pages: 73-76 Published: APR 1 2016

4. Thermal hysteresis kinetic effects of spin crossover nanoparticulated systems studied by FORC diagram method on an Ising-like model

By: Atitoaie, Alexandru; Stoleriu, Laurentiu; Tanasa, Radu; Stancu, Alexandru; Enachescu, Cristian

Conference: 10th International Symposium on Hysteresis Modeling and Micromagnetics (HMM)

Location: Alexandru Ioan Cuza Univ, Iasi, ROMANIA Date: MAY 18-20, 2015 -PHYSICA B-CONDENSED MATTER Volume: 486 Pages: 138-141 Published: APR 1 2016

5. Analysis of first order reversal curves in the thermal hysteresis of spin-crossover nanoparticles within the mechanoelastic model

By: Stoleriu, Laurentiu; Stancu, Alexandru; Chakraborty, Pradip; Hauser, Andreas; Enachescu, Cristian

JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 17 Article Number: 17B307 DOI: 10.1063/1.4914953 Published: MAY 2015

6. Micromagnetic Evaluation of Size Effects on the Critical Curves of Synthetic Antiferromagnetic Structures

By: Pinzaru, Ciprian; Stoleriu, Laurentiu; Stancu, Alexandru

IEEE TRANSACTIONS ON MAGNETICS Volume: 50 Issue: 7 Article Number: 7100405 Part: 2 Published: JUL 2014

7. Effect of damping on the laser induced ultrafast switching in rare earth-transition metal alloys

By: Oniciuc, E.; Stoleriu, L.; Cimpoesu, D.; Stancu, A.



APPLIED PHYSICS LETTERS Volume: 104 Issue: 22 Article Number: 222404 DOI:
10.1063/1.4881135 Published: JUN 2014

8.LLB simulation of the temperature dependent switching critical curve of a Stoner-Wohlfarth
macrospin in the presence of a polarized current

By: Oniciuc, E.; Stoleriu, L.; Stancu, A.

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 352 Pages: 99-106
Published: FEB 2014

9.Generalized Stoner-Wohlfarth model accurately describing the switching processes in pseudo-
single ferromagnetic particles

By: Cimpoesu, D.; Stoleriu, L.; Stancu, A.

JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 22 Article Number: 223901 DOI:
10.1063/1.4839895 Published: DEC 2013

10.Magnetization reversal in triangular L1(0)-FePt nanoislands

By: Markou, A.; Beltsios, K. G.; Gergidis, L. N.; Panagiotopoulos, I.; Bakas, T.; Ellinas, K.;
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By: Oniciuc, Eugen; Stoleriu, Laurentiu; Stancu, Alexandru

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By: Kanai, S.; Nakatani, Y.; Yamanouchi, M.; et al.

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By: Cristian Enachescu, Masamichi Nishino, Seiji Miyashita, Laurentiu Stoleriu, Alexandru Stancu

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By: Marco Deluca, Laurentiu Stoleriu, Lavinia Petronela Curecheriu, Nadejda Horchidan, Adelina Carmen Ianculescu, Carmen Galassi, Liliana Mitoseriu

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17. Micromagnetic analysis of switching and domain structure in amorphous metallic nanowires

By: Stoleriu L, Pinzaru C, Stancu A

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18. Thermal hysteresis in spin-crossover compounds studied within the mechanoelastic model and its potential application to nanoparticles

By: Stoleriu L, Chakraborty P, Hauser A, Stancu A, Enachescu C

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19. Study of the relaxation in diluted spin crossover molecular magnets in the framework of the mechano-elastic model

By: Enachescu C, Stoleriu L, Stancu A, Hauser A

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