Dora Altbir

List of Publications by Year
in descending order

136 papers	3,210 citations	186265 28 h-index	182427 51 g-index
137 all docs	137 docs citations	137 times ranked	2281 citing authors

#	Article	IF	Citations
1	Nanoscale zero valent supported by Zeolite and Montmorillonite: Template effect of the removal of lead ion from an aqueous solution. Journal of Hazardous Materials, 2016, 301, 371-380.	12.4	219
2	Reversal modes in magnetic nanotubes. Applied Physics Letters, 2007, 90, 102501.	3.3	205
3	Crossover between two different magnetization reversal modes in arrays of iron oxide nanotubes. Physical Review B, 2008, 77, .	3.2	139
4	Magnetic anisotropy in CoNi nanowire arrays: Analytical calculations and experiments. Physical Review B, 2012, 85, .	3.2	127
5	Geometry dependence of coercivity in Ni nanowire arrays. Nanotechnology, 2008, 19, 075713.	2.6	112
6	Angular dependence of magnetic properties in Ni nanowire arrays. Journal of Applied Physics, 2009, 106, .	2.5	112
7	Scaling Approach to the Magnetic Phase Diagram of Nanosized Systems. Physical Review Letters, 2002, 88, 237202.	7.8	100
8	Phase diagrams of magnetic nanotubes. Journal of Magnetism and Magnetic Materials, 2007, 308, 233-237.	2.3	93
9	Angular dependence of coercivity in magnetic nanotubes. Nanotechnology, 2007, 18, 445706.	2.6	75
10	Remanence of Ni nanowire arrays: Influence of size and labyrinth magnetic structure. Physical Review B, 2007, 75, .	3.2	74
11	Magnetic coupling in metallic granular systems. Physical Review B, 1996, 54, R6823-R6826.	3.2	71
12	Vortex state and effect of anisotropy in sub-100-nm magnetic nanodots. Journal of Applied Physics, 2006, 100, 104319.	2.5	69
13	Lead removal by nano-scale zero valent iron: Surface analysis and pH effect. Materials Research Bulletin, 2014, 59, 341-348.	5.2	66
14	Scaling relations for magnetic nanoparticles. Physical Review B, 2005, 71, .	3.2	65
15	Angular dependence of the transverse and vortex modesin magnetic nanotubes. European Physical Journal B, 2008, 66, 37-40.	1.5	60
16	Fast Monte Carlo method for magnetic nanoparticles. Physical Review B, 2006, 73, .	3.2	59
17	Size effects in ordered arrays of magnetic nanotubes: Pick your reversal mode. Journal of Applied Physics, 2009, 105, .	2.5	57
18	Stability of magnetic configurations in nanorings. Journal of Applied Physics, 2006, 100, 044311.	2.5	50

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19	Magnetostatic interactions between magnetic nanotubes. Applied Physics Letters, 2008, 93, 023101.	3.3	45
20	Asymmetric reversal of the hysteresis loop in exchange-biased nanodots. Physical Review B, 2005, 71, .	3.2	43
21	Reversal modes in arrays of interacting magnetic Ni nanowires: Monte Carlo simulations and scaling technique. Physical Review B, 2006, 74, .	3.2	42
22	Dipolar interaction and its interplay with interface roughness. Journal of Magnetism and Magnetic Materials, 1995, 149, L246-L250.	2.3	40
23	Magnetic Characterization of Nanowire Arrays Using First Order Reversal Curves. IEEE Transactions on Magnetics, 2008, 44, 2808-2811.	2.1	39
24	Dipolar magnetic interactions among magnetic microwires. Journal of Magnetism and Magnetic Materials, 2002, 249, 60-72.	2.3	37
25	A detailed analysis of dipolar interactions in arrays of bi-stable magnetic nanowires. Nanotechnology, 2007, 18, 415708.	2.6	37
26	Development of vortex state in circular magnetic nanodots: Theory and experiment. Physical Review B, 2010, 81, .	3.2	35
27	Effect of anisotropy in magnetic nanotubes. Journal of Magnetism and Magnetic Materials, 2007, 310, 2448-2450.	2.3	32
28	Magnetic cylindrical nanowires with single modulated diameter. Physical Review B, 2009, 80, .	3.2	31
29	Dipolar effects in multilayers with interface roughness. Physical Review B, 2000, 62, 6337-6342.	3.2	28
30	Asymmetric magnetic dots: A way to control magnetic properties. Journal of Applied Physics, 2011, 109, .	2.5	25
31	Oscillatory behavior of the domain wall dynamics in a curved cylindrical magnetic nanowire. Physical Review B, 2017, 96, .	3.2	25
32	Intra-wire coupling in segmented Ni/Cu nanowires deposited by electrodeposition. Nanotechnology, 2017, 28, 065709.	2.6	24
33	Magnetostatic bias in multilayer microwires: Theory and experiments. Journal of Applied Physics, 2009, 105, 023907.	2.5	23
34	Superparamagnetic Poly (3-hydroxybutyrate-co-3 hydroxyvalerate) (PHBV) nanoparticles for biomedical applications.. Electronic Journal of Biotechnology, 2013, 16, .	2.2	23
35	Surface rearrangement of nanoscale zerovalent iron: the role of pH and its implications in the kinetics of arsenate sorption. Environmental Technology (United Kingdom), 2014, 35, 2365-2372.	2.2	23
36	Stability of skyrmions on curved surfaces in the presence of a magnetic field. Journal of Magnetism and Magnetic Materials, 2015, 391, 179-183.	2.3	23

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37	Magnetization ground state and reversal modes of magnetic nanotori. Journal of Applied Physics, 2016, 120, .	2.5	23
38	Shifts in the skyrmion stabilization due to curvature effects in dome- and antidome-shaped surfaces. Physical Review B, 2020, 102, .	3.2	23
39	Measurement of the vortex core in sub-100â€‰nm Fe dots using polarized neutron scattering. Europhysics Letters, 2009, 86, 67008.	2.0	22
40	Ferromagnetic Nanostructures by Atomic Layer Deposition: From Thin Films Towards Core-Shell Nanotubes. ECS Transactions, 2007, 11, 139-148.	0.5	21
41	Manipulation of the RKKY exchange by voltages. Physical Review B, 2019, 100, .	3.2	21
42	Thermodynamics of two-dimensional magnetic nanoparticles. Europhysics Letters, 2002, 58, 603-609.	2.0	20
43	Domain wall control in wire-tube nanoelements. Applied Physics Letters, 2013, 102, 202407.	3.3	20
44	Coupling of skyrmions mediated by the RKKY interaction. Applied Physics Letters, 2018, 113, 212406.	3.3	20
45	Magnetic properties of layered nanorings. Applied Physics Letters, 2006, 89, 132501.	3.3	19
46	Topological magnetic solitons on a paraboloidal shell. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 47-53.	2.1	19
47	Analysis on the stability of in-surface magnetic configurations in toroidal nanoshells. Journal of Magnetism and Magnetic Materials, 2019, 478, 253-259.	2.3	19
48	Controlling domain wall oscillations in bent cylindrical magnetic wires. Physical Review B, 2020, 101, .	3.2	19
49	Skyrmion propagation along curved racetracks. Applied Physics Letters, 2021, 118, .	3.3	19
50	Detailed examination of domain wall types, their widths and critical diameters in cylindrical magnetic nanowires. Journal of Magnetism and Magnetic Materials, 2022, 542, 168495.	2.3	19
51	Ordering effects of the dipolar interaction in lattices of small magnetic particles. Journal of Magnetism and Magnetic Materials, 2004, 281, 372-377.	2.3	18
52	Typical skyrmions versus bimerons: A long-distance competition in ferromagnetic racetracks. Physical Review B, 2020, 102, .	3.2	18
53	Vortex core size in interacting cylindrical nanodot arrays. Nanotechnology, 2007, 18, 485707.	2.6	17
54	Relaxation times in exchange-biased nanostructures. Applied Physics Letters, 2003, 83, 332-334.	3.3	16

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55	Dipolar interaction and magnetic ordering in granular metallic materials. Physical Review B, 1998, 57, 13604-13609.	3.2	15
56	Magnetism of nanosized metallic particles. Physical Review B, 1999, 60, 6541-6544.	3.2	15
57	Magnetic behavior of nanoparticles in patterned thin films. Applied Physics Letters, 2003, 82, 3478-3480.	3.3	15
58	Magnetic properties of bi-phase micro- and nanotubes. Nanotechnology, 2007, 18, 225704.	2.6	14
59	Asymmetric hysteresis loop in magnetostatic-biased multilayer nanowires. Nanotechnology, 2009, 20, 445707.	2.6	14
60	Tailoring the magnetic properties of Fe asymmetric nanodots. Journal of Magnetism and Magnetic Materials, 2011, 323, 1563-1567.	2.3	14
61	Magnetic properties of elliptical and stadium-shaped nanoparticles: Effect of the shape anisotropy. Journal of Magnetism and Magnetic Materials, 2012, 324, 3824-3828.	2.3	14
62	Micromagnetic simulation of Fe asymmetric nanorings. Journal of Magnetism and Magnetic Materials, 2012, 324, 637-641.	2.3	14
63	Curvature-induced changes in the magnetic energy of vortices and skyrmions in paraboloidal nanoparticles. Journal of Applied Physics, 2015, 117, .	2.5	14
64	Magnetic MÃ¶bius stripe without frustration: Noncollinear metastable states. Physical Review B, 2017, 96, .	3.2	14
65	Curvature-induced emergence of a second critical field for domain wall dynamics in bent nanostripes. Applied Physics Letters, 2021, 118, .	3.3	14
66	Ultrafast relaxation rates and reversal time in disordered ferrimagnets. Physical Review B, 2015, 92, .	3.2	13
67	Magnetic hopfions in toroidal nanostructures driven by an Oersted magnetic field. Physical Review B, 2021, 104, .	3.2	13
68	Preparation and Characterization of Magnetic Composites Based on a Natural Zeolite. Clays and Clay Minerals, 2010, 58, 589-595.	1.3	12
69	Magnetization reversal in multisegmented nanowires: Parallel and serial reversal modes. Applied Physics Letters, 2012, 101, .	3.3	12
70	Hysteresis in Â±J Ising square lattices. Physical Review B, 1999, 59, 3325-3328.	3.2	11
71	Propagation of transverse domain walls in homogeneous magnetic nanowires. Journal of Applied Physics, 2008, 104, 013907.	2.5	11
72	General approach to the magnetostatic force and interaction between cylindrically shaped nanoparticles. Journal of Applied Physics, 2012, 111, 07D131.	2.5	11

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73	Tuning domain wall dynamics by shaping nanowires cross-sections. Scientific Reports, 2020, 10, 21911.	3.3	11
74	Magnetic ground states for bent nanotubes. Journal of Magnetism and Magnetic Materials, 2020, 507, 166754.	2.3	11
75	RKKY interaction between metallic clusters. Journal of Magnetism and Magnetic Materials, 1997, 167, 161-165.	2.3	10
76	Role of the alloy structure in the magnetic behavior of granular systems. Physical Review B, 2002, 66, .	3.2	10
77	Stability of magnetic nanoparticles inside ferromagnetic nanotubes. Applied Physics Letters, 2011, 98, .	3.3	10
78	Geometric aspects of the dipolar interaction in lattices of small particles. Journal of Physics Condensed Matter, 2005, 17, 1625-1633.	1.8	9
79	Magnetostatic interactions in cylindrical nanostructures with non-uniform magnetization. Journal of Magnetism and Magnetic Materials, 2012, 324, 1698-1705.	2.3	9
80	Controlling the nucleation and annihilation of skyrmions with magnetostatic interactions. Applied Physics Letters, 2019, 115, 082405.	3.3	9
81	Magnetism of nanosized metallic Co-clusters. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 603-605.	2.3	8
82	Magnetic properties of mosaic nanocomposites composed of nickel and cobalt nanowires. Journal of Magnetism and Magnetic Materials, 2016, 416, 325-328.	2.3	8
83	Twisted skyrmions through dipolar interactions. Journal of Magnetism and Magnetic Materials, 2019, 484, 451-455.	2.3	8
84	Dynamic and static properties of stadium-shaped antidot arrays. Scientific Reports, 2020, 10, 20024.	3.3	8
85	Effect of perpendicular uniaxial anisotropy on the annihilation fields of magnetic vortices. Journal of Applied Physics, 2013, 114, .	2.5	7
86	Simulated annealing and entanglement of formation for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>(</mml:mo><mml:mi>n</mml:mi><mml:mo>âŠ—</mml: mixed states. Physical Review A, 2015, 92, .	2.5	7
87	Magnetic vortex core in cylindrical nanostructures: Looking for its stability in terms of geometric and magnetic parameters. Journal of Magnetism and Magnetic Materials, 2016, 401, 848-852.	2.3	7
88	Chaotic dynamics of a magnetic particle at finite temperature. Physical Review B, 2017, 95, .	3.2	7
89	Magnetic metal films on paramagnetic substrates: A theoretical study. Physical Review B, 1989, 40, 6963-6970.	3.2	6
90	Searching for the nanoscopicâ€"macroscopic boundary. Journal of Magnetism and Magnetic Materials, 2013, 348, 154-159.	2.3	6

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91	Complex magnetic reversal modes in low-symmetry nanoparticles. Applied Physics Letters, 2014, 104, 123102.	3.3	6
92	Domain wall magnetoresistance in nanowires: Dependence on geometrical factors and material parameters. Journal of Magnetism and Magnetic Materials, 2014, 355, 197-200.	2.3	6
93	Dzyaloshinskii-Moriya interaction and magnetic ordering in 1D and 2D at nonzero T. Europhysics Letters, 2014, 106, 47004.	2.0	6
94	Unusual magnetic damping effect in a silverâ€"cobalt ferrite hetero nano-system. RSC Advances, 2015, 5, 17117-17122.	3.6	6
95	Dissipative magnetic breathers induced by time-modulated voltages. Physical Review E, 2018, 98, .	2.1	6
96	Scattering modes of skyrmions in a bilayer system with ferromagnetic coupling. Nanotechnology, 2021, 32, 175702.	2.6	6
97	Magnetoresistance in granular metallic systems. Journal of Physics Condensed Matter, 1997, 9, 9931-9938.	1.8	5
98	Simulation of hysteresis for Â±J triangular lattices. Physica B: Condensed Matter, 2000, 284-288, 1211-1212.	2.7	5
99	Reversal modes in small rings: Signature on the susceptibility. Journal of Applied Physics, 2014, 115, 223903.	2.5	5
100	Spin wave modes of two magnetostatic coupled spin transfer torque nano-oscillators. Journal of Applied Physics, 2018, 124, 162102.	2.5	5
101	Influence of curvature on the dynamical susceptibility of bent nanotubes. Results in Physics, 2022, 35, 105290.	4.1	5
102	Magnetic behavior of small magnetic particles. Physical Review B, 2001, 64, .	3.2	4
103	Perturbation potential produced by a monolayer of InAs on GaAs(100). Physical Review B, 2003, 68, .	3.2	4
104	Role of interactions in layered nanorings. International Journal of Nanotechnology, 2007, 4, 531.	0.2	4
105	Confinement of magnetic nanoparticles inside multisegmented nanotubes by means of magnetic field gradients. Journal of Applied Physics, 2012, 111, 013916.	2.5	4
106	Box model for hysteresis loops of arrays of Ni nanowires. Brazilian Journal of Physics, 2006, 36, 908-909.	1.4	4
107	Hysteresis cycles for Â±J spin glasses. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1248-1250.	2.3	3
108	Mechanisms of magnetization reversal in stadium-shaped particles. Journal of Applied Physics, 2012, 112, .	2.5	3

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109	Tailoring the nucleation of domain walls along multi-segmented cylindrical nanoelements. Nanotechnology, 2015, 26, 215701.	2.6	3
110	Multi-stability in low-symmetry magnetic nanoparticles. Journal of Applied Physics, 2015, 117, 223901.	2.5	3
111	Controlling domain wall nucleation and propagation with temperature gradients. Applied Physics Letters, 2016, 109, .	3.3	3
112	Monte Carlo Modeling of Mixed-Anisotropy $[ext{Co/Ni}]_{2}/ext{NiFe}$ Multilayers. IEEE Magnetics Letters, 2016, 7, 1-5.	1.1	3
113	Unusual behavior of the magnetization reversal in soft/hard multisegmented nanowires. Journal of Magnetism and Magnetic Materials, 2017, 438, 168-172.	2.3	3
114	Thermal gradients for the stabilization of a single domain wall in magnetic nanowires. Nanotechnology, 2018, 29, 345702.	2.6	3
115	New magnetic states in nanorings created by anisotropy gradients. Journal of Magnetism and Magnetic Materials, 2019, 484, 55-60.	2.3	3
116	Domain walls in curved thin surfaces. Journal of Magnetism and Magnetic Materials, 2020, 500, 166322.	2.3	3
117	Phase-shift control of the exchange coupling between magnetic impurities. Nanotechnology, 2020, 31, 355002.	2.6	3
118	A Magnetic Force Microscopy Study of Patterned T-Shaped Structures. Materials, 2021, 14, 1567.	2.9	3
119	Motion-induced inertial effects and topological phase transitions in skyrmion transport. Journal of Physics Condensed Matter, 2021, 33, 265403.	1.8	3
120	Magnetic multilayers: A detailed analysis of continuum versus discrete treatments. Journal of Applied Physics, 1994, 75, 3193-3195.	2.5	2
121	Magnetic relaxation in nanocrystalline systems: linking Monte Carlo steps with time. International Journal of Materials Research, 2002, 93, 974-977.	0.8	2
122	Properties of Fe8â^'NCoN nanoribbons and nanowires: A DFT approach. Journal of Magnetism and Magnetic Materials, 2013, 339, 75-80.	2.3	2
123	Ornstein-Zernike correlations and magnetic ordering in nanostructures. European Physical Journal B, 2014, 87, 1.	1.5	2
124	Geometry dependence of the magnetization reversal process in bridged dots. Journal of Magnetism and Magnetic Materials, 2017, 432, 304-308.	2.3	2
125	Synchronization of two spin-transfer-driven nano-oscillators coupled via magnetostatic fields. Physical Review E, 2019, 99, 032210.	2.1	2
126	Controlling domain wall chirality by combining hard and soft magnetic materials in planar nanostructures with wire-ring morphology. Current Applied Physics, 2021, 21, 180-183.	2.4	2

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127	Roughening and discreteness effects on the structure of magnetic layers. Solid State Communications, 1992, 82, 413-418.	1.9	1
128	Dipolar-driven formation of cobalt nanoparticle chains in polyethylene films. Materials Chemistry and Physics, 2015, 162, 229-233.	4.0	1
129	Towards Independent Behavior of Magnetic Slabs. IEEE Magnetics Letters, 2017, 8, 1-5.	1.1	1
130	Tuning the frequencies of the normal modes of a nanopillar oscillator through the magnetostatic interaction. Physical Review B, 2017, 96, .	3.2	1
131	On the relation of roughness and the dipolar interaction. AIP Conference Proceedings, 1996, , .	0.4	0
132	dâ€™Albuquerque e Castroet al.Reply:. Physical Review Letters, 2003, 91, .	7.8	0
133	Effect of Anisotropy and Exchange Bias on Reversal of Sub-100 nm Magnetic Dots. , 2006, , .		0
134	Magnetic vortices in Sub-100 nm magnets. , 2009, , .		0
135	Magnetic Metallic Overlayers on Paramagnetic Substrates. Springer Proceedings in Physics, 1990, , 102-108.	0.2	0
136	Magnetization Patterns of Exchange Coupled Metallic Multilayers. , 1994, , 111-117.		0