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	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
2	Influence of curvature on the dynamical susceptibility of bent nanotubes. Results in Physics, 2022, 35, 105290.	4.1	5
3	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
4	Scattering modes of skyrmions in a bilayer system with ferromagnetic coupling. Nanotechnology, 2021, 32, 175702.	2.6	6
5	A Magnetic Force Microscopy Study of Patterned T-Shaped Structures. Materials, 2021, 14, 1567.	2.9	3
6	Curvature-induced emergence of a second critical field for domain wall dynamics in bent nanostripes. Applied Physics Letters, 2021, 118, .	3.3	14
7	Skyrmion propagation along curved racetracks. Applied Physics Letters, 2021, 118, .	3.3	19
8	Motion-induced inertial effects and topological phase transitions in skyrmion transport. Journal of Physics Condensed Matter, 2021, 33, 265403.	1.8	3
9	Magnetic hopfions in toroidal nanostructures driven by an Oersted magnetic field. Physical Review B, 2021, 104, .	3.2	13
10	Domain walls in curved thin surfaces. Journal of Magnetism and Magnetic Materials, 2020, 500, 166322.	2.3	3
11	Dynamic and static properties of stadium-shaped antidot arrays. Scientific Reports, 2020, 10, 20024.	3.3	8
12	Shifts in the skyrmion stabilization due to curvature effects in dome- and antidome-shaped surfaces. Physical Review B, 2020, 102, .	3.2	23
13	Typical skyrmions versus bimerons: A long-distance competition in ferromagnetic racetracks. Physical Review B, 2020, 102, .	3.2	18
14	Tuning domain wall dynamics by shaping nanowires cross-sections. Scientific Reports, 2020, 10, 21911.	3.3	11
15	Controlling domain wall oscillations in bent cylindrical magnetic wires. Physical Review B, 2020, 101, .	3.2	19
16	Phase-shift control of the exchange coupling between magnetic impurities. Nanotechnology, 2020, 31, 355002.	2.6	3
17	Magnetic ground states for bent nanotubes. Journal of Magnetism and Magnetic Materials, 2020, 507, 166754.	2.3	11
18	Manipulation of the RKKY exchange by voltages. Physical Review B, 2019, 100, .	3.2	21

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19	Controlling the nucleation and annihilation of skyrmions with magnetostatic interactions. Applied Physics Letters, 2019, 115, 082405.	3.3	9
20	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
21	Synchronization of two spin-transfer-driven nano-oscillators coupled via magnetostatic fields. Physical Review E, 2019, 99, 032210.	2.1	2
22	Twisted skyrmions through dipolar interactions. Journal of Magnetism and Magnetic Materials, 2019, 484, 451-455.	2.3	8
23	New magnetic states in nanorings created by anisotropy gradients. Journal of Magnetism and Magnetic Materials, 2019, 484, 55-60.	2.3	3
24	Coupling of skyrmions mediated by the RKKY interaction. Applied Physics Letters, 2018, 113, 212406.	3.3	20
25	Dissipative magnetic breathers induced by time-modulated voltages. Physical Review E, 2018, 98, .	2.1	6
26	Spin wave modes of two magnetostatic coupled spin transfer torque nano-oscillators. Journal of Applied Physics, 2018, 124, 162102.	2.5	5
27	Thermal gradients for the stabilization of a single domain wall in magnetic nanowires. Nanotechnology, 2018, 29, 345702.	2.6	3
28	Intra-wire coupling in segmented Ni/Cu nanowires deposited by electrodeposition. Nanotechnology, 2017, 28, 065709.	2.6	24
29	Chaotic dynamics of a magnetic particle at finite temperature. Physical Review B, 2017, 95, .	3.2	7
30	Geometry dependence of the magnetization reversal process in bridged dots. Journal of Magnetism and Magnetic Materials, 2017, 432, 304-308.	2.3	2
31	Towards Independent Behavior of Magnetic Slabs. IEEE Magnetics Letters, 2017, 8, 1-5.	1.1	1
32	Unusual behavior of the magnetization reversal in soft/hard multisegmented nanowires. Journal of Magnetism and Magnetic Materials, 2017, 438, 168-172.	2.3	3
33	Magnetic MÃ¶bius stripe without frustration: Noncollinear metastable states. Physical Review B, 2017, 96, .	3.2	14
34	Tuning the frequencies of the normal modes of a nanopillar oscillator through the magnetostatic interaction. Physical Review B, 2017, 96, .	3.2	1
35	Oscillatory behavior of the domain wall dynamics in a curved cylindrical magnetic nanowire. Physical Review B, 2017, 96, .	3.2	25
36	Controlling domain wall nucleation and propagation with temperature gradients. Applied Physics Letters, 2016, 109, .	3.3	3

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37	Magnetization ground state and reversal modes of magnetic nanotori. Journal of Applied Physics, 2016, 120, .	2.5	23
38	Magnetic properties of mosaic nanocomposites composed of nickel and cobalt nanowires. Journal of Magnetism and Magnetic Materials, 2016, 416, 325-328.	2.3	8
39	Monte Carlo Modeling of Mixed-Anisotropy $[ext{Co/Ni}]_{2}/ext{NiFe}$ Multilayers. IEEE Magnetics Letters, 2016, 7, 1-5.	1.1	3
40	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
41	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
42	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	2
43	Ultrafast relaxation rates and reversal time in disordered ferrimagnets. Physical Review B, 2015, 92, .	3.2	13
44	Curvature-induced changes in the magnetic energy of vortices and skyrmions in paraboloidal nanoparticles. Journal of Applied Physics, 2015, 117, .	2.5	14
45	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
46	Unusual magnetic damping effect in a silverâ€“cobalt ferrite hetero nano-system. RSC Advances, 2015, 5, 17117-17122.	3.6	6
47	Dipolar-driven formation of cobalt nanoparticle chains in polyethylene films. Materials Chemistry and Physics, 2015, 162, 229-233.	4.0	1
48	Tailoring the nucleation of domain walls along multi-segmented cylindrical nanoelements. Nanotechnology, 2015, 26, 215701.	2.6	3
49	Multi-stability in low-symmetry magnetic nanoparticles. Journal of Applied Physics, 2015, 117, 223901.	2.5	3
50	Topological magnetic solitons on a paraboloidal shell. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 47-53.	2.1	19
51	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
52	Reversal modes in small rings: Signature on the susceptibility. Journal of Applied Physics, 2014, 115, 223903.	2.5	5
53	Complex magnetic reversal modes in low-symmetry nanoparticles. Applied Physics Letters, 2014, 104, 123102.	3.3	6
54	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

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55	Dzyaloshinskii-Moriya interaction and magnetic ordering in 1D and 2D at nonzero T. Europhysics Letters, 2014, 106, 47004.	2.0	6
56	Lead removal by nano-scale zero valent iron: Surface analysis and pH effect. Materials Research Bulletin, 2014, 59, 341-348.	5.2	66
57	Ornstein-Zernike correlations and magnetic ordering in nanostructures. European Physical Journal B, 2014, 87, 1.	1.5	2
58	Properties of Fe8â^'NCoN nanoribbons and nanowires: A DFT approach. Journal of Magnetism and Magnetic Materials, 2013, 339, 75-80.	2.3	2
59	Searching for the nanoscopicâ€"macroscopic boundary. Journal of Magnetism and Magnetic Materials, 2013, 348, 154-159.	2.3	6
60	Effect of perpendicular uniaxial anisotropy on the annihilation fields of magnetic vortices. Journal of Applied Physics, 2013, 114, .	2.5	7
61	Domain wall control in wire-tube nanoelements. Applied Physics Letters, 2013, 102, 202407.	3.3	20
62	Superparamagnetic Poly (3-hydroxybutyrate-co-3 hydroxyvalerate) (PHBV) nanoparticles for biomedical applications.. Electronic Journal of Biotechnology, 2013, 16, .	2.2	23
63	Confinement of magnetic nanoparticles inside multisegmented nanotubes by means of magnetic field gradients. Journal of Applied Physics, 2012, 111, 013916.	2.5	4
64	Magnetization reversal in multisegmented nanowires: Parallel and serial reversal modes. Applied Physics Letters, 2012, 101, .	3.3	12
65	Magnetic anisotropy in CoNi nanowire arrays: Analytical calculations and experiments. Physical Review B, 2012, 85, .	3.2	127
66	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
67	General approach to the magnetostatic force and interaction between cylindrically shaped nanoparticles. Journal of Applied Physics, 2012, 111, 07D131.	2.5	11
68	Mechanisms of magnetization reversal in stadium-shaped particles. Journal of Applied Physics, 2012, 112, .	2.5	3
69	Micromagnetic simulation of Fe asymmetric nanorings. Journal of Magnetism and Magnetic Materials, 2012, 324, 637-641.	2.3	14
70	Magnetostatic interactions in cylindrical nanostructures with non-uniform magnetization. Journal of Magnetism and Magnetic Materials, 2012, 324, 1698-1705.	2.3	9
71	Asymmetric magnetic dots: A way to control magnetic properties. Journal of Applied Physics, 2011, 109, .	2.5	25
72	Tailoring the magnetic properties of Fe asymmetric nanodots. Journal of Magnetism and Magnetic Materials, 2011, 323, 1563-1567.	2.3	14

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73	Stability of magnetic nanoparticles inside ferromagnetic nanotubes. Applied Physics Letters, 2011, 98, .	3.3	10
74	Development of vortex state in circular magnetic nanodots: Theory and experiment. Physical Review B, 2010, 81, .	3.2	35
75	Preparation and Characterization of Magnetic Composites Based on a Natural Zeolite. Clays and Clay Minerals, 2010, 58, 589-595.	1.3	12
76	Magnetic vortices in Sub-100 nm magnets. , 2009, , .		0
77	Size effects in ordered arrays of magnetic nanotubes: Pick your reversal mode. Journal of Applied Physics, 2009, 105, .	2.5	57
78	Asymmetric hysteresis loop in magnetostatic-biased multilayer nanowires. Nanotechnology, 2009, 20, 445707.	2.6	14
79	Measurement of the vortex core in sub-100â€‰nm Fe dots using polarized neutron scattering. Europhysics Letters, 2009, 86, 67008.	2.0	22
80	Magnetic cylindrical nanowires with single modulated diameter. Physical Review B, 2009, 80, .	3.2	31
81	Angular dependence of magnetic properties in Ni nanowire arrays. Journal of Applied Physics, 2009, 106, .	2.5	112
82	Magnetostatic bias in multilayer microwires: Theory and experiments. Journal of Applied Physics, 2009, 105, 023907.	2.5	23
83	Angular dependence of the transverse and vortex modesin magnetic nanotubes. European Physical Journal B, 2008, 66, 37-40.	1.5	60
84	Crossover between two different magnetization reversal modes in arrays of iron oxide nanotubes. Physical Review B, 2008, 77, .	3.2	139
85	Magnetostatic interactions between magnetic nanotubes. Applied Physics Letters, 2008, 93, 023101.	3.3	45
86	Geometry dependence of coercivity in Ni nanowire arrays. Nanotechnology, 2008, 19, 075713.	2.6	112
87	Propagation of transverse domain walls in homogeneous magnetic nanowires. Journal of Applied Physics, 2008, 104, 013907.	2.5	11
88	Magnetic Characterization of Nanowire Arrays Using First Order Reversal Curves. IEEE Transactions on Magnetics, 2008, 44, 2808-2811.	2.1	39
89	Magnetic properties of bi-phase micro- and nanotubes. Nanotechnology, 2007, 18, 225704.	2.6	14
90	Remanence of Ni nanowire arrays: Influence of size and labyrinth magnetic structure. Physical Review B, 2007, 75, .	3.2	74

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91	Role of interactions in layered nanorings. International Journal of Nanotechnology, 2007, 4, 531.	0.2	4
92	Ferromagnetic Nanostructures by Atomic Layer Deposition: From Thin Films Towards Core-Shell Nanotubes. ECS Transactions, 2007, 11, 139-148.	0.5	21
93	Vortex core size in interacting cylindrical nanodot arrays. Nanotechnology, 2007, 18, 485707.	2.6	17
94	Angular dependence of coercivity in magnetic nanotubes. Nanotechnology, 2007, 18, 445706.	2.6	75
95	A detailed analysis of dipolar interactions in arrays of bi-stable magnetic nanowires. Nanotechnology, 2007, 18, 415708.	2.6	37
96	Reversal modes in magnetic nanotubes. Applied Physics Letters, 2007, 90, 102501.	3.3	205
97	Phase diagrams of magnetic nanotubes. Journal of Magnetism and Magnetic Materials, 2007, 308, 233-237.	2.3	93
98	Effect of anisotropy in magnetic nanotubes. Journal of Magnetism and Magnetic Materials, 2007, 310, 2448-2450.	2.3	32
99	Stability of magnetic configurations in nanorings. Journal of Applied Physics, 2006, 100, 044311.	2.5	50
100	Reversal modes in arrays of interacting magnetic Ni nanowires: Monte Carlo simulations and scaling technique. Physical Review B, 2006, 74, .	3.2	42
101	Magnetic properties of layered nanorings. Applied Physics Letters, 2006, 89, 132501.	3.3	19
102	Fast Monte Carlo method for magnetic nanoparticles. Physical Review B, 2006, 73, .	3.2	59
103	Vortex state and effect of anisotropy in sub-100-nm magnetic nanodots. Journal of Applied Physics, 2006, 100, 104319.	2.5	69
104	Effect of Anisotropy and Exchange Bias on Reversal of Sub-100 nm Magnetic Dots. , 2006, , .		0
105	Box model for hysteresis loops of arrays of Ni nanowires. Brazilian Journal of Physics, 2006, 36, 908-909.	1.4	4
106	Geometric aspects of the dipolar interaction in lattices of small particles. Journal of Physics Condensed Matter, 2005, 17, 1625-1633.	1.8	9
107	Asymmetric reversal of the hysteresis loop in exchange-biased nanodots. Physical Review B, 2005, 71, .	3.2	43
108	Scaling relations for magnetic nanoparticles. Physical Review B, 2005, 71, .	3.2	65

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109	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
110	dâ€™Albuquerque e Castroet al.Reply:. Physical Review Letters, 2003, 91, .	7.8	0
111	Magnetic behavior of nanoparticles in patterned thin films. Applied Physics Letters, 2003, 82, 3478-3480.	3.3	15
112	Perturbation potential produced by a monolayer of InAs on GaAs(100). Physical Review B, 2003, 68, .	3.2	4
113	Relaxation times in exchange-biased nanostructures. Applied Physics Letters, 2003, 83, 332-334.	3.3	16
114	Role of the alloy structure in the magnetic behavior of granular systems. Physical Review B, 2002, 66, .	3.2	10
115	Thermodynamics of two-dimensional magnetic nanoparticles. Europhysics Letters, 2002, 58, 603-609.	2.0	20
116	Magnetic relaxation in nanocrystalline systems: linking Monte Carlo steps with time. International Journal of Materials Research, 2002, 93, 974-977.	0.8	2
117	Scaling Approach to the Magnetic Phase Diagram of Nanosized Systems. Physical Review Letters, 2002, 88, 237202.	7.8	100
118	Dipolar magnetic interactions among magnetic microwires. Journal of Magnetism and Magnetic Materials, 2002, 249, 60-72.	2.3	37
119	Magnetism of nanosized metallic Co-clusters. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 603-605.	2.3	8
120	Hysteresis cycles for Â±J spin glasses. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1248-1250.	2.3	3
121	Magnetic behavior of small magnetic particles. Physical Review B, 2001, 64, .	3.2	4
122	Simulation of hysteresis for Â±J triangular lattices. Physica B: Condensed Matter, 2000, 284-288, 1211-1212.	2.7	5
123	Dipolar effects in multilayers with interface roughness. Physical Review B, 2000, 62, 6337-6342.	3.2	28
124	Hysteresis in Â±J Ising square lattices. Physical Review B, 1999, 59, 3325-3328.	3.2	11
125	Magnetism of nanosized metallic particles. Physical Review B, 1999, 60, 6541-6544.	3.2	15
126	Dipolar interaction and magnetic ordering in granular metallic materials. Physical Review B, 1998, 57, 13604-13609.	3.2	15

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127	Magnetoresistance in granular metallic systems. Journal of Physics Condensed Matter, 1997, 9, 9931-9938.	1.8	5
128	RKKY interaction between metallic clusters. Journal of Magnetism and Magnetic Materials, 1997, 167, 161-165.	2.3	10
129	On the relation of roughness and the dipolar interaction. AIP Conference Proceedings, 1996, , .	0.4	0
130	Magnetic coupling in metallic granular systems. Physical Review B, 1996, 54, R6823-R6826.	3.2	71
131	Dipolar interaction and its interplay with interface roughness. Journal of Magnetism and Magnetic Materials, 1995, 149, L246-L250.	2.3	40
132	Magnetic multilayers: A detailed analysis of continuum versus discrete treatments. Journal of Applied Physics, 1994, 75, 3193-3195.	2.5	2
133	Magnetization Patterns of Exchange Coupled Metallic Multilayers. , 1994, , 111-117.		0
134	Roughening and discreteness effects on the structure of magnetic layers. Solid State Communications, 1992, 82, 413-418.	1.9	1
135	Magnetic Metallic Overlayers on Paramagnetic Substrates. Springer Proceedings in Physics, 1990, , 102-108.	0.2	0
136	Magnetic metal films on paramagnetic substrates: A theoretical study. Physical Review B, 1989, 40, 6963-6970.	3.2	6