Josep Nogues

List of Publications by Year
in descending order

256 papers	21,620 citations	17405 63 h-index	9553 142 g-index
265 all docs	265 docs citations	265 times ranked	14970 citing authors

#	Article	IF	Citations
1	Exchange bias. Journal of Magnetism and Magnetic Materials, 1999, 192, 203-232.	1.0	4,314
2	Exchange bias in nanostructures. Physics Reports, 2005, 422, 65-117.	10.3	1,722
3	Beating the superparamagnetic limit with exchange bias. Nature, 2003, 423, 850-853.	13.7	1,468
4	Ordered magnetic nanostructures: fabrication and properties. Journal of Magnetism and Magnetic Materials, 2003, 256, 449-501.	1.0	856
5	Making flexible magnetic aerogels and stiff magnetic nanopaper using cellulose nanofibrils as templates. Nature Nanotechnology, 2010, 5, 584-588.	15.6	753
6	Positive Exchange Bias in FeF2-Fe Bilayers. Physical Review Letters, 1996, 76, 4624-4627.	2.9	499
7	Flux Pinning in a Superconductor by an Array of Submicrometer Magnetic Dots. Physical Review Letters, 1997, 79, 1929-1932.	2.9	477
8	Applications of exchange coupled bi-magnetic hard/soft and soft/hard magnetic core/shell nanoparticles. Physics Reports, 2015, 553, 1-32.	10.3	391
9	Asymmetric Magnetization Reversal in Exchange-Biased Hysteresis Loops. Physical Review Letters, 2000, 84, 3986-3989.	2.9	310
10	Synthesis and Size-Dependent Exchange Bias in Inverted Coreâ"Shell MnO|Mn3O4Nanoparticles. Journal of the American Chemical Society, 2007, 129, 9102-9108.	6.6	261
11	Coercivity Enhancement in Exchange Biased Systems Driven by Interfacial Magnetic Frustration. Physical Review Letters, 2000, 84, 3466-3469.	2.9	258
12	Origin of the Asymmetric Magnetization Reversal Behavior in Exchange-Biased Systems: Competing Anisotropies. Physical Review Letters, 2005, 95, 057204.	2.9	255
13	Correlation between antiferromagnetic interface coupling and positive exchange bias. Physical Review B, 2000, 61, 1315-1317.	1.1	239
14	Cubic versus Spherical Magnetic Nanoparticles: The Role of Surface Anisotropy. Journal of the American Chemical Society, 2008, 130, 13234-13239.	6.6	226
15	Designer Magnetoplasmonics with Nickel Nanoferromagnets. Nano Letters, 2011, 11, 5333-5338.	4.5	203
16	Shell-Driven Magnetic Stability in Core-Shell Nanoparticles. Physical Review Letters, 2006, 97, 157203.	2.9	195
17	A.c. susceptibility and intergranular critical current density of high Tc superconductors. Cryogenics, 1989, 29, 800-808.	0.9	177
18	Plasmonic Nickel Nanoantennas. Small, 2011, 7, 2341-2347.	5.2	175

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19	Robust antiferromagnetic coupling in hard-soft bi-magnetic core/shell nanoparticles. Nature Communications, 2013, 4, 2960.	5.8	160
20	Perpendicular coupling at Feâ€“FeF2 interfaces. Applied Physics Letters, 1998, 72, 617-619.	1.5	154
21	High- and Low-Temperature Crystal and Magnetic Structures of Îµ-Fe2O3and Their Correlation to Its Magnetic Properties. Chemistry of Materials, 2006, 18, 3889-3897.	3.2	150
22	Role of interfacial structure on exchange-biasedFeF2â^'Fe. Physical Review B, 1999, 59, 6984-6993.	1.1	149
23	Large exchange bias and its connection to interface structure in FeF2â€“Fe bilayers. Applied Physics Letters, 1996, 68, 3186-3188.	1.5	139
24	Antisites and electron-doping effects on the magnetic transition ofSr2FeMoO6double perovskite. Physical Review B, 2003, 67, .	1.1	138
25	Iron filled single-wall carbon nanotubes â€“ A novel ferromagnetic medium. Chemical Physics Letters, 2006, 421, 129-133.	1.2	130
26	Optimized Synthesis of the Elusive Îµ-Fe2O3 Phase via Solâ^'Gel Chemistry. Chemistry of Materials, 2004, 16, 5542-5548.	3.2	128
27	Two-Stage Magnetization Reversal in Exchange Biased Bilayers. Physical Review Letters, 2001, 86, 4394-4397.	2.9	124
28	Magnetic susceptibility of sintered and powdered Yâ€Baâ€Cuâ€O. Journal of Applied Physics, 1988, 63, 980-983.	1.1	117
29	Differences in the Magnetic Properties of Co, Fe, and Ni 250â^'300 nm Wide Nanowires Electrodeposited in Amorphous Anodized Alumina Templates. Chemistry of Materials, 2005, 17, 1829-1834.	3.2	116
30	Improving the energy product of hard magnetic materials. Physical Review B, 2002, 65, .	1.1	112
31	Tuning exchange bias. Applied Physics Letters, 1999, 75, 2304-2306.	1.5	111
32	Emergence of noncollinear anisotropies from interfacial magnetic frustration in exchange-bias systems. Physical Review B, 2009, 80, .	1.1	111
33	Tuning the Magneto-Optical Response of Nanosize Ferromagnetic Ni Disks Using the Phase of Localized Plasmons. Physical Review Letters, 2013, 111, 167401.	2.9	111
34	Fabrication and thermal stability of arrays of Fe nanodots. Applied Physics Letters, 2002, 81, 4434-4436.	1.5	109
35	Microstructural effects and large microhardness in cobalt processed by high pressure torsion consolidation of ball milled powders. Acta Materialia, 2003, 51, 6385-6393.	3.8	106
36	Size-Dependent Passivation Shell and Magnetic Properties in Antiferromagnetic/Ferrimagnetic Core/Shell MnO Nanoparticles. Journal of the American Chemical Society, 2010, 132, 9398-9407.	6.6	106

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37	Room-temperature coercivity enhancement in mechanically alloyed antiferromagnetic-ferromagnetic powders. Applied Physics Letters, 1999, 75, 3177-3179.	1.5	105
38	Nonzero orbital moment in high coercivity<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Ïµ</mml:mi><mml:msub><mml:mrow><mml:mtext>-Fe</mml:mtext></mml:mrow><mml:mn>2 low-temperature collapse of the magnetocrystalline anisotropy. Physical Review B, 2009, 79, .	1.1	105
39	Coercivity and squareness enhancement in ball-milled hard magneticâ€“antiferromagnetic composites. Applied Physics Letters, 2001, 79, 1142-1144.	1.5	103
40	Large coercivity and low-temperature magnetic reorientation in Îµâ€²Fe2O3 nanoparticles. Journal of Applied Physics, 2005, 98, 044307.	1.1	103
41	Exploiting Length Scales of Exchange-Bias Systems to Fully Tailor Double-Shifted Hysteresis Loops. Advanced Materials, 2005, 17, 2978-2983.	11.1	102
42	Highly active ZnO-based biomimetic fern-like microleaves for photocatalytic water decontamination using sunlight. Applied Catalysis B: Environmental, 2019, 248, 129-146.	10.8	98
43	Nanocrystalline Electroplated Cuâ€“Ni: Metallic Thin Films with Enhanced Mechanical Properties and Tunable Magnetic Behavior. Advanced Functional Materials, 2010, 20, 983-991.	7.8	92
44	Effect of anisotropy on the critical antiferromagnet thickness in exchange-biased bilayers. Physical Review B, 2002, 66, .	1.1	90
45	Competing interfacial exchange and Zeeman energies in exchange biased bilayers. Physical Review B, 1999, 60, 12837-12840.	1.1	88
46	Magnetic Proximity Effect Features in Antiferromagnetic/Ferrimagnetic Core-Shell Nanoparticles. Physical Review Letters, 2009, 102, 247201.	2.9	85
47	Influence of magnetization on the reordering of nanostructured ball-milled Fe-40 at. % Al powders. Physical Review B, 1998, 58, R11864-R11867.	1.1	82
48	Synthesis of compositionally graded nanocast NiO/NiCo2O4/Co3O4 mesoporous composites with tunable magnetic properties. Journal of Materials Chemistry, 2010, 20, 7021.	6.7	81
49	Precise Size Control of the Growth of Fe₃O₄ Nanocubes over a Wide Size Range Using a Rationally Designed One-Pot Synthesis. ACS Nano, 2019, 13, 7716-7728.	7.3	79
50	Exchange bias in ferromagnetic nanoparticles embedded in an antiferromagnetic matrix. International Journal of Nanotechnology, 2005, 2, 23.	0.1	77
51	Tailoring the exchange bias via shape anisotropy in ferromagnetic/antiferromagnetic exchange-coupled systems. Physical Review B, 2003, 67, .	1.1	76
52	Steam Purification for the Removal of Graphitic Shells Coating Catalytic Particles and the Shortening of Singleâ€Walled Carbon Nanotubes. Small, 2008, 4, 1501-1506.	5.2	76
53	Strongly exchange coupled inverse ferrimagnetic soft/hard, MnxFe3â^'xO4/FexMn3â^'xO4, core/shell heterostructured nanoparticles. Nanoscale, 2012, 4, 5138.	2.8	76
54	Origin of the large dispersion of magnetic properties in nanostructured oxides: Fe_xO/Fe₃O₄nanoparticles as a case study. Nanoscale, 2015, 7, 3002-3015.	2.8	76

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55	Fabrication of submicrometric magnetic structures by electron-beam lithography. Journal of Applied Physics, 1998, 84, 411-415.	1.1	73
56	Enhanced Magnetic Properties in Antiferromagnetic-Core/Ferrimagnetic-Shell Nanoparticles. Scientific Reports, 2015, 5, 9609.	1.6	73
57	Beanâ€™s, Kimâ€™s, and exponential critical-state models for high-Tcsuperconductors. Physical Review B, 1990, 41, 9510-9512.	1.1	72
58	Direct Magnetic Patterning due to the Generation of Ferromagnetism by Selective Ion Irradiation of Paramagnetic FeAl Alloys. Small, 2009, 5, 229-234.	5.2	71
59	Relation between exchange anisotropy and magnetization reversal asymmetry inFe/MnF2bilayers. Physical Review B, 2002, 65, .	1.1	70
60	Antiferromagnetic spin flop and exchange bias. Physical Review B, 2000, 61, R6455-R6458.	1.1	69
61	Microstructural aspects of the hcp-fcc allotropic phase transformation induced in cobalt by ball milling. Philosophical Magazine, 2003, 83, 439-455.	0.7	69
62	Seeded Growth Synthesis of Auâ€“Fe₃O₄ Heterostructured Nanocrystals: Rational Design and Mechanistic Insights. Chemistry of Materials, 2017, 29, 4022-4035.	3.2	67
63	Grain Boundary Segregation and Interdiffusion Effects in Nickelâ€“Copper Alloys: An Effective Means to Improve the Thermal Stability of Nanocrystalline Nickel. ACS Applied Materials & Interfaces, 2011, 3, 2265-2274.	4.0	63
64	Coercivity enhancement above the NÃ©el temperature of an antiferromagnet/ferromagnet bilayer. Journal of Applied Physics, 2002, 92, 1483-1488.	1.1	62
65	Exchange bias effects in Fe nanoparticles embedded in an antiferromagnetic Cr2O3matrix. Nanotechnology, 2004, 15, S211-S214.	1.3	62
66	Influence of in-plane crystalline quality of an antiferromagnet on perpendicular exchange coupling and exchange bias. Physical Review B, 2002, 65, .	1.1	61
67	Magnetization Reversal in Submicron Disks: Exchange Biased Vortices. Physical Review Letters, 2005, 95, 067201.	2.9	61
68	High Temperature Magnetic Stabilization of Cobalt Nanoparticles by an Antiferromagnetic Proximity Effect. Physical Review Letters, 2015, 115, 057201.	2.9	61
69	Remanence Plots as a Probe of Spin Disorder in Magnetic Nanoparticles. Chemistry of Materials, 2017, 29, 8258-8268.	3.2	61
70	Volume expansion contribution to the magnetism of atomically disordered intermetallic alloys. Physical Review B, 2006, 74, .	1.1	59
71	Exchange anisotropy and the antiferromagnetic surface order parameter. Physical Review B, 1997, 56, 2332-2335.	1.1	58
72	Spin waves in exchange-biased Fe/FeF2. Physical Review B, 1999, 59, 3333-3336.	1.1	57

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73	Voltage-Controlled ONâ€“OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film. ACS Nano, 2018, 12, 10291-10300.	7.3	57
74	Highly reduced ecotoxicity of ZnO-based micro/nanostructures on aquatic biota: Influence of architecture, chemical composition, fixation, and photocatalytic efficiency. Water Research, 2020, 169, 115210.	5.3	57
75	Role of stacking faults in the structural and magnetic properties of ball-milled cobalt. Physical Review B, 2003, 68, .	1.1	56
76	Highly asymmetric magnetic behavior in exchange biased systems induced by noncollinear field cooling. Applied Physics Letters, 2009, 95, .	1.5	56
77	3D Visualization of the Iron Oxidation State in FeO/Fe₃O₄Coreâ€“Shell Nanocubes from Electron Energy Loss Tomography. Nano Letters, 2016, 16, 5068-5073.	4.5	56
78	Two-, Three-, and Four-Component Magnetic Multilayer Onion Nanoparticles Based on Iron Oxides and Manganese Oxides. Journal of the American Chemical Society, 2011, 133, 16738-16741.	6.6	55
79	Correlation between stacking fault formation, allotropic phase transformations and magnetic properties of ball-milled cobalt. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 869-873.	2.6	54
80	Continuously graded anisotropy in single (Fe53Pt47)100â^'xCux films. Applied Physics Letters, 2010, 97, .	1.5	53
81	Using magnetoresistance to probe reversal asymmetry in exchange biased bilayers. Journal of Applied Physics, 2000, 88, 344-347.	1.1	52
82	High anisotropy Smâ€“Co nanoparticles: Preparation by cluster gun technique and their magnetic properties. Journal of Applied Physics, 2003, 93, 7592-7594.	1.1	51
83	Imprinting Vortices into Antiferromagnets. Physical Review Letters, 2006, 97, 067201.	2.9	51
84	Enhanced Ultrafast Nonlinear Optical Response in Ferrite Core/Shell Nanostructures with Excellent Optical Limiting Performance. Small, 2018, 14, 1701001.	5.2	51
85	Induced anisotropy and positive exchange bias: A temperature, angular, and cooling field study by ferromagnetic resonance. Physical Review B, 2002, 65, .	1.1	49
86	Hybrid Ni@ZnO@ZnSâ€Microalgae for Circular Economy: A Smart Route to the Efficient Integration of Solar Photocatalytic Water Decontamination and Bioethanol Production. Advanced Science, 2020, 7, 1902447.	5.6	49
87	Isothermal tuning of exchange bias using pulsed fields. Applied Physics Letters, 2003, 82, 3044-3046.	1.5	48
88	Unveiling a New High-Temperature Ordered Magnetic Phase in Îµ-Fe₂O₃. Chemistry of Materials, 2017, 29, 9705-9713.	3.2	47
89	Direct evidence for an interdiffused intermediate layer in bi-magnetic coreâ€“shell nanoparticles. Nanoscale, 2014, 6, 11911-11920.	2.8	46
90	Hardening and softening of FeAl during milling and annealing. Intermetallics, 2000, 8, 805-813.	1.8	44

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91	Enhanced ferromagnetic interactions in electron doped NdxSr2ÂxFeMoO6double perovskites. Journal of Physics Condensed Matter, 2004, 16, 3173-3182.	0.7	44
92	Reversible post-synthesis tuning of the superparamagnetic blocking temperature of Î³-Fe2O3nanoparticles by adsorption and desorption of Co(ii) ions. Journal of Materials Chemistry, 2007, 17, 322-328.	6.7	43
93	Enhanced Coercivity in Co-Rich Near-Stoichiometric CoxFe3-xO4+Î´ Nanoparticles Prepared in Large Batches. Chemistry of Materials, 2007, 19, 4957-4963.	3.2	43
94	Controlled Reduction of NiO Using Reactive Ball Milling under Hydrogen Atmosphere Leading to Niâ˜NiO Nanocomposites. Chemistry of Materials, 2004, 16, 5664-5669.	3.2	42
95	Voltage-driven motion of nitrogen ions: a new paradigm for magneto-ionics. Nature Communications, 2020, 11, 5871.	5.8	42
96	Mesoscopic Model for the Simulation of Large Arrays of Biâ€Magnetic Core/Shell Nanoparticles. Advanced Materials, 2012, 24, 4331-4336.	11.1	41
97	Voltageâ€Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energyâ€Efficient Magnetic Actuation. Advanced Functional Materials, 2017, 27, 1701904.	7.8	41
98	Cold compaction of metalâ€“ceramic (ferromagneticâ€“antiferromagnetic) composites using high pressure torsion. Journal of Alloys and Compounds, 2007, 434-435, 505-508.	2.8	40
99	Ion mass dependence of irradiation-induced local creation of ferromagnetism in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Fe</mml:mtext></mml:mrow><mml:mrow><mml:mn>60</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review B, 2008, 77, .	1.1	40
100	Nanostructured MnGa films on Si/SiO2 with 20.5 kOe room temperature coercivity. Journal of Applied Physics, 2011, 110, .	1.1	40
101	Magnetization reversal in long chains of submicrometric Co dots. Applied Physics Letters, 1998, 72, 255-257.	1.5	39
102	Changes in ferromagnetic spin structure induced by exchange bias in Fe/MnF2films. Physical Review B, 2004, 70, .	1.1	38
103	Oxide Wizard: An EELS Application to Characterize the White Lines of Transition Metal Edges. Microscopy and Microanalysis, 2014, 20, 698-705.	0.2	38
104	Maximizing Exchange Bias in Co/CoO Core/Shell Nanoparticles by Lattice Matching between the Shell and the Embedding Matrix. Chemistry of Materials, 2017, 29, 5200-5206.	3.2	38
105	Green Electrochemical Template Synthesis of CoPt Nanoparticles with Tunable Size, Composition, and Magnetism from Microemulsions Using an Ionic Liquid (bmimPF₆). ACS Nano, 2014, 8, 4630-4639.	7.3	37
106	Magnetic properties of ball milled Fe-40 Al at.% alloys. IEEE Transactions on Magnetics, 1998, 34, 1129-1131.	1.2	36
107	Origin of complex exchange anisotropy inFe/MnF2bilayers. Physical Review B, 2003, 68, .	1.1	36
108	Magneto-optical study of magnetization reversal asymmetry in exchange bias. Applied Physics Letters, 2006, 89, 202512.	1.5	36

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109	Distinguishing the core from the shell in MnOx/MnOy and FeOx/MnOx core/shell nanoparticles through quantitative electron energy loss spectroscopy (EELS) analysis. Micron, 2012, 43, 30-36.	1.1	36
110	Resolving Material-Specific Structures within Fe₃O₄|Î³-Mn₂O₃ Core|Shell Nanoparticles Using Anomalous Small-Angle X-ray Scattering. ACS Nano, 2013, 7, 921-931.	7.3	36
111	Polarizability and magnetoplasmonic properties of magnetic general nanoellipsoids. Optics Express, 2013, 21, 9875.	1.7	34
112	Measurements of the ferromagnetic/antiferromagnetic interfacial exchange energy in CO/CoO and Fe/FeF2 layers (invited). Journal of Applied Physics, 1998, 83, 6893-6895.	1.1	33
113	Tailoring of paramagnetic (structurally ordered) nanometric grains separated by ferromagnetic (structurally disordered) grain boundaries: Isolating grain-boundary magnetic effects. Physical Review B, 2001, 63, .	1.1	33
114	Direct Synthesis of Isolated L10 FePt Nanoparticles in a Robust TiO2 Matrix via a Combined Solâ€“Gel/Pyrolysis Route. Advanced Materials, 2006, 18, 466-470.	11.1	33
115	Highly efficient electrochemical and chemical hydrogenation of 4-nitrophenol using recyclable narrow mesoporous magnetic CoPt nanowires. Journal of Materials Chemistry A, 2016, 4, 15676-15687.	5.2	33
116	Magnetization reversal in circularly exchange-biased ferromagnetic disks. Physical Review B, 2009, 79, .	1.1	32
117	First-order reversal curve analysis of graded anisotropy FePtCu films. Applied Physics Letters, 2010, 97, 202501.	1.5	32
118	Ultraporous Single Phase Iron Oxideâ˜Silica Nanostructured Aerogels from Ferrous Precursors. Langmuir, 2004, 20, 1425-1429.	1.6	31
119	Cold Consolidation of Metalâ€“Ceramic Nanocomposite Powders with Large Ceramic Fractions. Advanced Functional Materials, 2008, 18, 3293-3298.	7.8	31
120	Simultaneous Local Heating/Thermometry Based on Plasmonic Magnetochromic Nanoheaters. Small, 2018, 14, e1800868.	5.2	31
121	Room temperature magnetic hardening in mechanically milled ferromagneticâ€“antiferromagnetic composites. Journal of Magnetism and Magnetic Materials, 2000, 219, 53-57.	1.0	30
122	Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers. Physical Review B, 2001, 64, .	1.1	30
123	New possibilities of synchrotron radiation diffraction topography for the investigation of `exotic' magnetic domains. Journal Physics D: Applied Physics, 2001, 34, A114-A116.	1.3	30
124	High-coercivity ultralight transparent magnets. Applied Physics Letters, 2003, 82, 4307-4309.	1.5	30
125	Periodic Arrays of Micrometer and Sub-micrometer Magnetic Structures Prepared by Nanoindentation of a Nonmagnetic Intermetallic Compound. Advanced Materials, 2006, 18, 1717-1720.	11.1	30
126	Simultaneous in-plane and out-of-plane exchange bias using a single antiferromagnetic layer resolved by x-ray magnetic circular dichroism. Applied Physics Letters, 2009, 95, .	1.5	30

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127	Nanostructures and the proximity effect. Journal Physics D: Applied Physics, 2002, 35, 2398-2402.	1.3	29
128	Exchange bias in antiferromagnetic-ferromagnetic-antiferromagnetic structures with out-of-plane magnetization. Physical Review B, 2005, 72, .	1.1	29
129	Selective generation of local ferromagnetism in austenitic stainless steel using nanoindentation. Applied Physics Letters, 2006, 89, 032509.	1.5	28
130	Probing vertically graded anisotropy in FePtCu films. Physical Review B, 2011, 84, .	1.1	28
131	Effective ionic-liquid microemulsion based electrodeposition of mesoporous Coâ€“Pt films for methanol oxidation catalysis in alkaline media. Journal of Materials Chemistry A, 2016, 4, 7805-7814.	5.2	28
132	Galvanic Replacement onto Complex Metal-Oxide Nanoparticles: Impact of Water or Other Oxidizers in the Formation of either Fully Dense Onion-like or Multicomponent Hollow MnO_x/FeO_x Structures. Chemistry of Materials, 2016, 28, 8025-8031.	3.2	28
133	Exchange coupling mechanism for magnetization reversal and thermal stability of Co nanoparticles embedded in a CoO matrix. Journal of Magnetism and Magnetic Materials, 2005, 294, 111-116.	1.0	27
134	HighT c superconductive materials: Bulk or twinned domain/grain boundary percolative network superconductors?. European Physical Journal B, 1988, 70, 9-13.	0.6	26
135	Tunable High-Field Magnetization in Strongly Exchange-Coupled Freestanding Co/CoO Core/Shell Coaxial Nanowires. ACS Applied Materials & Interfaces, 2016, 8, 22477-22483.	4.0	26
136	Magnetically-actuated mesoporous nanowires for enhanced heterogeneous catalysis. Applied Catalysis B: Environmental, 2017, 217, 81-91.	10.8	26
137	Large Magnetoelectric Effects in Electrodeposited Nanoporous Microdisks Driven by Effective Surface Charging and Magneto-Ionics. ACS Applied Materials & Interfaces, 2018, 10, 44897-44905.	4.0	26
138	Simultaneous Individual and Dipolar Collective Properties in Binary Assemblies of Magnetic Nanoparticles. Chemistry of Materials, 2020, 32, 969-981.	3.2	26
139	Two-fold origin of the deformation-induced ferromagnetism in bulk Fe₆₀Al₄₀(at.%) alloys. New Journal of Physics, 2008, 10, 103030.	1.2	25
140	Structural, mechanical and magnetic properties of nanostructured FeAl alloys during disordering and thermal recovery. Scripta Materialia, 1999, 11, 689-695.	0.5	24
141	Improved magnetoresistance through spacer thickness optimization in tilted pseudo spin valves based on L10 (111)-oriented FePtCu fixed layers. Journal of Applied Physics, 2009, 106, 053909.	1.1	24
142	Direct evidence of imprinted vortex states in the antiferromagnet of exchange biased microdisks. Applied Physics Letters, 2009, 95, .	1.5	24
143	Role of anisotropy configuration in exchange-biased systems. Journal of Applied Physics, 2011, 109, .	1.1	24
144	Atomic-Scale Determination of Cation Inversion in Spinel-Based Oxide Nanoparticles. Nano Letters, 2018, 18, 5854-5861.	4.5	24

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145	Direct measurement of depth-dependent Fe spin structure during magnetization reversal in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Fe</mml:mtext><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mtext>MnF</mml:mtext> bilayers. Physical Review B, 2008, 78, .	1.1	23
146	Tailoring Staircase-like Hysteresis Loops in Electrodeposited Trisegmented Magnetic Nanowires: a Strategy toward Minimization of Interwire Interactions. ACS Applied Materials & Interfaces, 2016, 8, 4109-4117.	4.0	23
147	Fractal dimension of thin film surfaces of gold sputter deposited on mica: a scanning tunneling microscopic study. Physica A: Statistical Mechanics and Its Applications, 1992, 182, 532-541.	1.2	22
148	Controlling magnetic vortices through exchange bias. Applied Physics Letters, 2006, 88, 042502.	1.5	22
149	Improving the Magnetic Properties of Coâ€“CoO Systems by Designed Oxygen Implantation Profiles. ACS Applied Materials & Interfaces, 2013, 5, 4320-4327.	4.0	22
150	Magnetic domain and domain-wall imaging of submicron Co dots by probing the magnetostrictive response using atomic force microscopy. Applied Physics Letters, 2000, 76, 2931-2933.	1.5	21
151	Are the high Tc superconducting materials bulk superconductors or grain boundary percolating network superconductors? (abstract). Journal of Applied Physics, 1988, 63, 4213-4213.	1.1	20
152	Magnetic investigations on the disordering of a ball milled Feâ€“40 Alat% alloy. Journal of Magnetism and Magnetic Materials, 1999, 203, 129-131.	1.0	20
153	Anomalous anisotropic ac susceptibility response ofLa1â^'xSrxMnO3(xâ‰ˆ1/8)crystals: Relevance to phase separation. Physical Review B, 2000, 62, 3879-3882.	1.1	20
154	Magnetic Instability Regions in Patterned Structures: Influence of Element Shape on Magnetization Reversal Dynamics. Physical Review Letters, 2007, 98, 147202.	2.9	20
155	Correlating material-specific layers and magnetic distributions within onion-like Fe3O4/MnO/Î³-Mn2O3 core/shell nanoparticles. Journal of Applied Physics, 2013, 113, 17B531.	1.1	20
156	Interdependence between training and magnetization reversal in granular Co-CoO exchange bias systems. Physical Review B, 2014, 89, .	1.1	20
157	Modeling the collective magnetic behavior of highly-packed arrays of multi-segmented nanowires. New Journal of Physics, 2016, 18, 013026.	1.2	20
158	Magnetically amplified photothermal therapies and multimodal imaging with magneto-plasmonic nanodomes. Applied Materials Today, 2018, 12, 430-440.	2.3	20
159	Outâ€ofâ€Plane Magnetic Patterning Based on Indentationâ€Induced Nanocrystallization of a Metallic Glass. Small, 2010, 6, 1543-1549.	5.2	18
160	Mesoporous Oxide-Diluted Magnetic Semiconductors Prepared by Co Implantation in Nanocast 3D-Ordered In₂O_{3â€“y} Materials. Journal of Physical Chemistry C, 2013, 117, 17084-17091.	1.5	18
161	A new reversal mode in exchange coupled antiferromagnetic/ferromagnetic disks: distorted viscous vortex. Nanoscale, 2015, 7, 9878-9885.	2.8	18
162	Increasing the Curie temperature of Ca2FeMoO6double perovskite by introducing near-neighbour antiferromagnetic interactions. Journal of Physics Condensed Matter, 2005, 17, 8037-8047.	0.7	17

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163	Patterning of magnetic structures on austenitic stainless steel by local ion beam nitriding. Acta Materialia, 2008, 56, 4570-4576.	3.8	17
164	Using exchange bias to extend the temperature range of square loop behavior in [Ptâˆ•Co] multilayers with perpendicular anisotropy. Applied Physics Letters, 2005, 87, 242504.	1.5	16
165	Controlled generation of ferromagnetic martensite from paramagnetic austenite in AISI 316L austenitic stainless steel. Journal of Materials Research, 2009, 24, 565-573.	1.2	16
166	Electrochemically synthesized amorphous and crystalline nanowires: dissimilar nanomechanical behavior in comparison with homologous flat films. Nanoscale, 2016, 8, 1344-1351.	2.8	16
167	Novel Ba-hexaferrite structural variations stabilized on the nanoscale as building blocks for epitaxial bi-magnetic hard/soft sandwiched maghemite/hexaferrite/maghemite nanoplatelets with out-of-plane easy axis and enhanced magnetization. Nanoscale, 2017, 9, 17551-17560.	2.8	16
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