Josep Nogues

List of Publications by Citations

248 papers	19,366 citations	60 h-index	135 g-index
264 ext. papers	20,540 ext. citations	6.4 avg, IF	6.52 L-index

#	Paper	IF	Citations
248	Exchange bias. *Journal of Magnetism and Magnetic Materials*, **1999**, 192, 203-232	2.8	3904
247	Exchange bias in nanostructures. *Physics Reports*, **2005**, 422, 65-117	27.7	1563
246	Beating the superparamagnetic limit with exchange bias. *Nature*, **2003**, 423, 850-3	50.4	1335
245	Ordered magnetic nanostructures: fabrication and properties. *Journal of Magnetism and Magnetic Materials*, **2003**, 256, 449-501	2.8	801
244	Making flexible magnetic aerogels and stiff magnetic nanopaper using cellulose nanofibrils as templates. *Nature Nanotechnology*, **2010**, 5, 584-8	28.7	684
243	Positive exchange bias in FeF2-Fe bilayers. *Physical Review Letters*, **1996**, 76, 4624-4627	7.4	448
242	Flux Pinning in a Superconductor by an Array of Submicrometer Magnetic Dots. *Physical Review Letters*, **1997**, 79, 1929-1932	7.4	447
241	Applications of exchange coupled bi-magnetic hard/soft and soft/hard magnetic core/shell nanoparticles. *Physics Reports*, **2015**, 553, 1-32	27.7	310
240	Asymmetric magnetization reversal in exchange-biased hysteresis loops. *Physical Review Letters*, **2000**, 84, 3986-9	7.4	296
239	Synthesis and size-dependent exchange bias in inverted core-shell MnO|Mn3O4 nanoparticles. *Journal of the American Chemical Society*, **2007**, 129, 9102-8	16.4	248
238	Coercivity enhancement in exchange biased systems driven by interfacial magnetic frustration. *Physical Review Letters*, **2000**, 84, 3466-9	7.4	239
237	Origin of the asymmetric magnetization reversal behavior in exchange-biased systems: competing anisotropies. *Physical Review Letters*, **2005**, 95, 057204	7.4	234
236	Correlation between antiferromagnetic interface coupling and positive exchange bias. *Physical Review B*, **2000**, 61, 1315-1317	3.3	216
235	Cubic versus spherical magnetic nanoparticles: the role of surface anisotropy. *Journal of the American Chemical Society*, **2008**, 130, 13234-9	16.4	196
234	Shell-driven magnetic stability in core-shell nanoparticles. *Physical Review Letters*, **2006**, 97, 157203	7.4	179
233	Designer magnetoplasmonics with nickel nanoferromagnets. *Nano Letters*, **2011**, 11, 5333-8	11.5	173
232	A.c. susceptibility and intergranular critical current density of high Tc superconductors. *Cryogenics*, **1989**, 29, 800-808	1.8	172

231	Plasmonic nickel nanoantennas. *Small*, **2011**, 7, 2341-7	11	150
230	Perpendicular coupling at Fe□eF2 interfaces. *Applied Physics Letters*, **1998**, 72, 617-619	3.4	142
229	Role of interfacial structure on exchange-biased FeF2□e. *Physical Review B*, **1999**, 59, 6984-6993	3.3	137
228	Large exchange bias and its connection to interface structure in FeF2□e bilayers. *Applied Physics Letters*, **1996**, 68, 3186-3188	3.4	133
227	Robust antiferromagnetic coupling in hard-soft bi-magnetic core/shell nanoparticles. *Nature Communications*, **2013**, 4, 2960	17.4	132
226	Antisites and electron-doping effects on the magnetic transition of Sr2FeMoO6 double perovskite. *Physical Review B*, **2003**, 67,	3.3	127
225	High- and Low-Temperature Crystal and Magnetic Structures of □Fe2O3 and Their Correlation to Its Magnetic Properties. *Chemistry of Materials*, **2006**, 18, 3889-3897	9.6	124
224	Iron filled single-wall carbon nanotubes □A novel ferromagnetic medium. *Chemical Physics Letters*, **2006**, 421, 129-133	2.5	118
223	Optimized Synthesis of the Elusive □Fe2O3 Phase via Sol□el Chemistry. *Chemistry of Materials*, **2004**, 16, 5542-5548	9.6	117
222	Two-stage magnetization reversal in exchange biased bilayers. *Physical Review Letters*, **2001**, 86, 4394-7	7.4	115
221	Differences in the Magnetic Properties of Co, Fe, and Ni 250□300 nm Wide Nanowires Electrodeposited in Amorphous Anodized Alumina Templates. *Chemistry of Materials*, **2005**, 17, 1829-1834	9.6	111
220	Magnetic susceptibility of sintered and powdered Y-Ba-Cu-O. *Journal of Applied Physics*, **1988**, 63, 980-983	2.5	108
219	Tuning exchange bias. *Applied Physics Letters*, **1999**, 75, 2304-2306	3.4	104
218	Fabrication and thermal stability of arrays of Fe nanodots. *Applied Physics Letters*, **2002**, 81, 4434-4436	3.4	103
217	Room-temperature coercivity enhancement in mechanically alloyed antiferromagnetic-ferromagnetic powders. *Applied Physics Letters*, **1999**, 75, 3177-3179	3.4	103
216	Microstructural effects and large microhardness in cobalt processed by high pressure torsion consolidation of ball milled powders. *Acta Materialia*, **2003**, 51, 6385-6393	8.4	102
215	Size-dependent passivation shell and magnetic properties in antiferromagnetic/ferrimagnetic core/shell MnO nanoparticles. *Journal of the American Chemical Society*, **2010**, 132, 9398-407	16.4	100
214	Emergence of noncollinear anisotropies from interfacial magnetic frustration in exchange-bias systems. *Physical Review B*, **2009**, 80,	3.3	100

213	Improving the energy product of hard magnetic materials. *Physical Review B*, **2002**, 65,	3.3	98
212	Coercivity and squareness enhancement in ball-milled hard magnetic□antiferromagnetic composites. *Applied Physics Letters*, **2001**, 79, 1142-1144	3.4	91
211	Exploiting Length Scales of Exchange-Bias Systems to Fully Tailor Double-Shifted Hysteresis Loops. *Advanced Materials*, **2005**, 17, 2978-2983	24	89
210	Nonzero orbital moment in high coercivity ?-Fe2O3 and low-temperature collapse of the magnetocrystalline anisotropy. *Physical Review B*, **2009**, 79,	3.3	88
209	Large coercivity and low-temperature magnetic reorientation in □Fe2O3 nanoparticles. *Journal of Applied Physics*, **2005**, 98, 044307	2.5	85
208	Tuning the magneto-optical response of nanosize ferromagnetic Ni disks using the phase of localized plasmons. *Physical Review Letters*, **2013**, 111, 167401	7.4	84
207	Effect of anisotropy on the critical antiferromagnet thickness in exchange-biased bilayers. *Physical Review B*, **2002**, 66,	3.3	84
206	Competing interfacial exchange and Zeeman energies in exchange biased bilayers. *Physical Review B*, **1999**, 60, 12837-12840	3.3	82
205	Influence of magnetization on the reordering of nanostructured ball-milled Fe-40 at. % Al powders. *Physical Review B*, **1998**, 58, R11864-R11867	3.3	77
204	Highly active ZnO-based biomimetic fern-like microleaves for photocatalytic water decontamination using sunlight. *Applied Catalysis B: Environmental*, **2019**, 248, 129-146	21.8	76
203	Magnetic proximity effect features in antiferromagnetic/ferrimagnetic core-shell nanoparticles. *Physical Review Letters*, **2009**, 102, 247201	7.4	74
202	Exchange bias in ferromagnetic nanoparticles embedded in an antiferromagnetic matrix. *International Journal of Nanotechnology*, **2005**, 2, 23	1.5	74
201	Synthesis of compositionally graded nanocast NiO/NiCo2O4/Co3O4 mesoporous composites with tunable magnetic properties. *Journal of Materials Chemistry*, **2010**, 20, 7021		73
200	Nanocrystalline Electroplated Cu□Ni: Metallic Thin Films with Enhanced Mechanical Properties and Tunable Magnetic Behavior. *Advanced Functional Materials*, **2010**, 20, 983-991	15.6	73
199	Tailoring the exchange bias via shape anisotropy in ferromagnetic/antiferromagnetic exchange-coupled systems. *Physical Review B*, **2003**, 67,	3.3	73
198	Fabrication of submicrometric magnetic structures by electron-beam lithography. *Journal of Applied Physics*, **1998**, 84, 411-415	2.5	67
197	Enhanced magnetic properties in antiferromagnetic-core/ferrimagnetic-shell nanoparticles. *Scientific Reports*, **2015**, 5, 9609	4.9	66
196	Strongly exchange coupled inverse ferrimagnetic soft/hard, Mn(x)Fe(3-x)O4/Fe(x)Mn(3-x)O4, core/shell heterostructured nanoparticles. *Nanoscale*, **2012**, 4, 5138-47	7.7	66

195	Steam purification for the removal of graphitic shells coating catalytic particles and the shortening of single-walled carbon nanotubes. *Small*, **2008**, 4, 1501-6	11	66
194	Antiferromagnetic spin flop and exchange bias. *Physical Review B*, **2000**, 61, R6455-R6458	3.3	66
193	Bean–, Kim–, and exponential critical-state models for high-Tc superconductors. *Physical Review B*, **1990**, 41, 9510-9512	3.3	66
192	Relation between exchange anisotropy and magnetization reversal asymmetry in Fe/MnF2 bilayers. *Physical Review B*, **2002**, 65,	3.3	65
191	Microstructural aspects of the hcp-fcc allotropic phase transformation induced in cobalt by ball milling. *Philosophical Magazine*, **2003**, 83, 439-455	1.6	64
190	Origin of the large dispersion of magnetic properties in nanostructured oxides: Fe(x)O/Fe3O4 nanoparticles as a case study. *Nanoscale*, **2015**, 7, 3002-15	7.7	63
189	Direct magnetic patterning due to the generation of ferromagnetism by selective ion irradiation of paramagnetic FeAl alloys. *Small*, **2009**, 5, 229-34	11	63
188	Exchange bias effects in Fe nanoparticles embedded in an antiferromagnetic Cr2O3matrix. *Nanotechnology*, **2004**, 15, S211-S214	3.4	58
187	Influence of in-plane crystalline quality of an antiferromagnet on perpendicular exchange coupling and exchange bias. *Physical Review B*, **2002**, 65,	3.3	57
186	Coercivity enhancement above the Nël temperature of an antiferromagnet/ferromagnet bilayer. *Journal of Applied Physics*, **2002**, 92, 1483-1488	2.5	57
185	Volume expansion contribution to the magnetism of atomically disordered intermetallic alloys. *Physical Review B*, **2006**, 74,	3.3	56
184	Spin waves in exchange-biased Fe/FeF2. *Physical Review B*, **1999**, 59, 3333-3336	3.3	56
183	High Temperature Magnetic Stabilization of Cobalt Nanoparticles by an Antiferromagnetic Proximity Effect. *Physical Review Letters*, **2015**, 115, 057201	7.4	55
182	Exchange anisotropy and the antiferromagnetic surface order parameter. *Physical Review B*, **1997**, 56, 2332-2335	3.3	55
181	Magnetization reversal in submicron disks: exchange biased vortices. *Physical Review Letters*, **2005**, 95, 067201	7.4	55
180	Seeded Growth Synthesis of Au–Fe3O4 Heterostructured Nanocrystals: Rational Design and Mechanistic Insights. *Chemistry of Materials*, **2017**, 29, 4022-4035	9.6	53
179	Grain boundary segregation and interdiffusion effects in nickel-copper alloys: an effective means to improve the thermal stability of nanocrystalline nickel. *ACS Applied Materials & Interfaces*, **2011**, 3, 2265-74	9.5	52
178	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	5.3	52

177	Role of stacking faults in the structural and magnetic properties of ball-milled cobalt. *Physical Review B*, **2003**, 68,	3.3	51
176	Two-, three-, and four-component magnetic multilayer onion nanoparticles based on iron oxides and manganese oxides. *Journal of the American Chemical Society*, **2011**, 133, 16738-41	16.4	50
175	Continuously graded anisotropy in single (Fe53Pt47)100−xCux films. *Applied Physics Letters*, **2010**, 97, 182504	3.4	50
174	Highly asymmetric magnetic behavior in exchange biased systems induced by noncollinear field cooling. *Applied Physics Letters*, **2009**, 95, 122508	3.4	50
173	High anisotropy SmCo nanoparticles: Preparation by cluster gun technique and their magnetic properties. *Journal of Applied Physics*, **2003**, 93, 7592-7594	2.5	48
172	Using magnetoresistance to probe reversal asymmetry in exchange biased bilayers. *Journal of Applied Physics*, **2000**, 88, 344-347	2.5	47
171	3D Visualization of the Iron Oxidation State in FeO/Fe3O4 Core-Shell Nanocubes from Electron Energy Loss Tomography. *Nano Letters*, **2016**, 16, 5068-73	11.5	47
170	Voltage-Controlled ON-OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film. *ACS Nano*, **2018**, 12, 10291-10300	16.7	47
169	Isothermal tuning of exchange bias using pulsed fields. *Applied Physics Letters*, **2003**, 82, 3044-3046	3.4	46
168	Remanence Plots as a Probe of Spin Disorder in Magnetic Nanoparticles. *Chemistry of Materials*, **2017**, 29, 8258-8268	9.6	45
167	Induced anisotropy and positive exchange bias: A temperature, angular, and cooling field study by ferromagnetic resonance. *Physical Review B*, **2002**, 65,	3.3	45
166	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	12.5	44
165	Imprinting vortices into antiferromagnets. *Physical Review Letters*, **2006**, 97, 067201	7.4	43
164	Hardening and softening of FeAl during milling and annealing. *Intermetallics*, **2000**, 8, 805-813	3.5	43
163	Reversible post-synthesis tuning of the superparamagnetic blocking temperature of γ-Fe2O3 nanoparticles by adsorption and desorption of Co(II) ions. *Journal of Materials Chemistry*, **2007**, 17, 322-328		42
162	Precise Size Control of the Growth of FeO Nanocubes over a Wide Size Range Using a Rationally Designed One-Pot Synthesis. *ACS Nano*, **2019**, 13, 7716-7728	16.7	41
161	Enhanced ferromagnetic interactions in electron doped NdxSr2−xFeMoO6double perovskites. *Journal of Physics Condensed Matter*, **2004**, 16, 3173-3182	1.8	41
160	Hybrid Ni@ZnO@ZnS-Microalgae for Circular Economy: A Smart Route to the Efficient Integration of Solar Photocatalytic Water Decontamination and Bioethanol Production. *Advanced Science*, **2020**, 7, 1902447	13.6	40

159	Direct evidence for an interdiffused intermediate layer in bi-magnetic core-shell nanoparticles. *Nanoscale*, **2014**, 6, 11911-20	7.7	39
158	Enhanced Ultrafast Nonlinear Optical Response in Ferrite Core/Shell Nanostructures with Excellent Optical Limiting Performance. *Small*, **2018**, 14, 1701001	11	38
157	Enhanced Coercivity in Co-Rich Near-Stoichiometric CoxFe3-xO4+δ Nanoparticles Prepared in Large Batches. *Chemistry of Materials*, **2007**, 19, 4957-4963	9.6	38
156	Controlled Reduction of NiO Using Reactive Ball Milling under Hydrogen Atmosphere Leading to Ni@NiO Nanocomposites. *Chemistry of Materials*, **2004**, 16, 5664-5669	9.6	38
155	Mesoscopic model for the simulation of large arrays of bi-magnetic core/shell nanoparticles. *Advanced Materials*, **2012**, 24, 4331-6	24	37
154	Nanostructured MnGa films on Si/SiO2 with 20.5 kOe room temperature coercivity. *Journal of Applied Physics*, **2011**, 110, 093902	2.5	37
153	Green electrochemical template synthesis of CoPt nanoparticles with tunable size, composition, and magnetism from microemulsions using an ionic liquid (bmimPF6). *ACS Nano*, **2014**, 8, 4630-9	16.7	36
152	Ion mass dependence of irradiation-induced local creation of ferromagnetism in Fe60Al40 alloys. *Physical Review B*, **2008**, 77,	3.3	36
151	Changes in ferromagnetic spin structure induced by exchange bias in Fe/MnF2 films. *Physical Review B*, **2004**, 70,	3.3	36
150	Origin of complex exchange anisotropy in Fe/MnF2 bilayers. *Physical Review B*, **2003**, 68,	3.3	36
149	Oxide Wizard: an EELS application to characterize the white lines of transition metal edges. *Microscopy and Microanalysis*, **2014**, 20, 698-705	0.5	35
148	Resolving material-specific structures within Fe@MnO core|shell nanoparticles using anomalous small-angle X-ray scattering. *ACS Nano*, **2013**, 7, 921-31	16.7	35
147	Magnetic properties of ball milled Fe-40 Al at.% alloys. *IEEE Transactions on Magnetics*, **1998**, 34, 1129-1131	1.2	34
146	Distinguishing the core from the shell in MnO(x)/MnO(y) and FeO(x)/MnO(x) core/shell nanoparticles through quantitative electron energy loss spectroscopy (EELS) analysis. *Micron*, **2012**, 43, 30-6	2.3	33
145	Magneto-optical study of magnetization reversal asymmetry in exchange bias. *Applied Physics Letters*, **2006**, 89, 202512	3.4	33
144	Cold compaction of metal–ceramic (ferromagnetic–antiferromagnetic) composites using high pressure torsion. *Journal of Alloys and Compounds*, **2007**, 434-435, 505-508	5.7	33
143	Magnetization reversal in long chains of submicrometric Co dots. *Applied Physics Letters*, **1998**, 72, 255-257	3.4	33
142	Unveiling a New High-Temperature Ordered Magnetic Phase in ε-Fe2O3. *Chemistry of Materials*, **2017**, 29, 9705-9713	9.6	32

141	Magnetization reversal in circularly exchange-biased ferromagnetic disks. *Physical Review B*, **2009**, 79,	3.3	32
140	Direct Synthesis of Isolated L10 FePt Nanoparticles in a Robust TiO2 Matrix via a Combined Sol□el/Pyrolysis Route. *Advanced Materials*, **2006**, 18, 466-470	24	32
139	Voltage-Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energy-Efficient Magnetic Actuation. *Advanced Functional Materials*, **2017**, 27, 1701904	15.6	31
138	Polarizability and magnetoplasmonic properties of magnetic general nanoellipsoids. *Optics Express*, **2013**, 21, 9875-89	3.3	31
137	First-order reversal curve analysis of graded anisotropy FePtCu films. *Applied Physics Letters*, **2010**, 97, 202501	3.4	31
136	Tailoring of paramagnetic (structurally ordered) nanometric grains separated by ferromagnetic (structurally disordered) grain boundaries: Isolating grain-boundary magnetic effects. *Physical Review B*, **2001**, 63,	3.3	31
135	Measurements of the ferromagnetic/antiferromagnetic interfacial exchange energy in CO/CoO and Fe/FeF2 layers (invited). *Journal of Applied Physics*, **1998**, 83, 6893-6895	2.5	31
134	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, 152515	3.4	29
133	Periodic Arrays of Micrometer and Sub-micrometer Magnetic Structures Prepared by Nanoindentation of a Nonmagnetic Intermetallic Compound. *Advanced Materials*, **2006**, 18, 1717-1720	24	29
132	Exchange bias in antiferromagnetic-ferromagnetic-antiferromagnetic structures with out-of-plane magnetization. *Physical Review B*, **2005**, 72,	3.3	29
131	Ultraporous single phase iron oxide-silica nanostructured aerogels from ferrous precursors. *Langmuir*, **2004**, 20, 1425-9	4	28
130	Room temperature magnetic hardening in mechanically milled ferromagnetic□ntiferromagnetic composites. *Journal of Magnetism and Magnetic Materials*, **2000**, 219, 53-57	2.8	28
129	Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers. *Physical Review B*, **2001**, 64,	3.3	28
128	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	9.6	27
127	Probing vertically graded anisotropy in FePtCu films. *Physical Review B*, **2011**, 84,	3.3	27
126	Cold Consolidation of Metal□eramic Nanocomposite Powders with Large Ceramic Fractions. *Advanced Functional Materials*, **2008**, 18, 3293-3298	15.6	27
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124	High-coercivity ultralight transparent magnets. *Applied Physics Letters*, **2003**, 82, 4307-4309	3.4	26

123	Voltage-driven motion of nitrogen ions: a new paradigm for magneto-ionics. *Nature Communications*, **2020**, 11, 5871	17.4	26
122	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	13	25
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120	Nanostructures and the proximity effect. *Journal Physics D: Applied Physics*, **2002**, 35, 2398-2402	3	25
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118	Large Magnetoelectric Effects in Electrodeposited Nanoporous Microdisks Driven by Effective Surface Charging and Magneto-Ionics. *ACS Applied Materials & Interfaces*, **2018**, 10, 44897-44905	9.5	24
117	Simultaneous Local Heating/Thermometry Based on Plasmonic Magnetochromic Nanoheaters. *Small*, **2018**, 14, e1800868	11	24
116	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	2.5	23
115	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 MnOx/FeOx Structures. *Chemistry of Materials*, **2016**, 28, 8025-8031	9.6	22
114	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	3.3	22
113	Effective ionic-liquid microemulsion based electrodeposition of mesoporous CoPt films for methanol oxidation catalysis in alkaline media. *Journal of Materials Chemistry A*, **2016**, 4, 7805-7814	13	22
112	Tunable High-Field Magnetization in Strongly Exchange-Coupled Freestanding Co/CoO Core/Shell Coaxial Nanowires. *ACS Applied Materials & Interfaces*, **2016**, 8, 22477-83	9.5	22
111	Role of anisotropy configuration in exchange-biased systems. *Journal of Applied Physics*, **2011**, 109, 07D739	2.9	21
110	Direct measurement of depth-dependent Fe spin structure during magnetization reversal in Fe/MnF2 exchange-coupled bilayers. *Physical Review B*, **2008**, 78,	3.3	21
109	Controlling magnetic vortices through exchange bias. *Applied Physics Letters*, **2006**, 88, 042502	3.4	21
108	Structural, mechanical and magnetic properties of nanostructured FeAl alloys during disordering and thermal recovery. *Scripta Materialia*, **1999**, 11, 689-695		21
107	Improving the magnetic properties of Co-CoO systems by designed oxygen implantation profiles. *ACS Applied Materials & Interfaces*, **2013**, 5, 4320-7	9.5	20
106	Direct evidence of imprinted vortex states in the antiferromagnet of exchange biased microdisks. *Applied Physics Letters*, **2009**, 95, 012510	3.4	20

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103	Are the high Tc superconducting materials bulk superconductors or grain boundary percolating network superconductors? (abstract). *Journal of Applied Physics*, **1988**, 63, 4213-4213	2.5	20
102	Magnetically-actuated mesoporous nanowires for enhanced heterogeneous catalysis. *Applied Catalysis B: Environmental*, **2017**, 217, 81-91	21.8	19
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100	Correlating material-specific layers and magnetic distributions within onion-like Fe3O4/MnO/γ-Mn2O3 core/shell nanoparticles. *Journal of Applied Physics*, **2013**, 113, 17B531	2.5	18
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98	Tailoring Staircase-like Hysteresis Loops in Electrodeposited Trisegmented Magnetic Nanowires: a Strategy toward Minimization of Interwire Interactions. *ACS Applied Materials & Interfaces*, **2016**, 8, 4109-17	9.5	17
97	Interdependence between training and magnetization reversal in granular Co-CoO exchange bias systems. *Physical Review B*, **2014**, 89,	3.3	17
96	Magnetic investigations on the disordering of a ball milled Fe≈40 Al at% alloy. *Journal of Magnetism and Magnetic Materials*, **1999**, 203, 129-131	2.8	17
95	A new reversal mode in exchange coupled antiferromagnetic/ferromagnetic disks: distorted viscous vortex. *Nanoscale*, **2015**, 7, 9878-85	7.7	16
94	Out-of-plane magnetic patterning based on indentation-induced nanocrystallization of a metallic glass. *Small*, **2010**, 6, 1543-9	11	16
93	Patterning of magnetic structures on austenitic stainless steel by local ion beam nitriding. *Acta Materialia*, **2008**, 56, 4570-4576	8.4	16
92	Modeling the collective magnetic behavior of highly-packed arrays of multi-segmented nanowires. *New Journal of Physics*, **2016**, 18, 013026	2.9	16
91	Magnetically amplified photothermal therapies and multimodal imaging with magneto-plasmonic nanodomes. *Applied Materials Today*, **2018**, 12, 430-440	6.6	15
90	Using exchange bias to extend the temperature range of square loop behavior in [Pt/Co] multilayers with perpendicular anisotropy. *Applied Physics Letters*, **2005**, 87, 242504	3.4	15
89	Tunable Magnetism in Nanoporous CuNi Alloys by Reversible Voltage-Driven Element-Selective Redox Processes. *Small*, **2018**, 14, e1704396	11	14
88	Mesoporous Oxide-Diluted Magnetic Semiconductors Prepared by Co Implantation in Nanocast 3D-Ordered In2O3(y) Materials. *Journal of Physical Chemistry C*, **2013**, 117, 17084-17091	3.8	14

87	Pseudo Spin Valves Using a (1 1 2)-Textured D0$_{22}$ Mn$_{2.3-2.4}$Ga Fixed Layer. *IEEE Magnetics Letters*, **2010**, 1, 2500104-2500104	1.6	14
86	Increasing the Curie temperature of Ca2FeMoO6double perovskite by introducing near-neighbour antiferromagnetic interactions. *Journal of Physics Condensed Matter*, **2005**, 17, 8037-8047	1.8	14
85	A new approach to increase the Curie temperature of Fe□Mo double perovskites. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 126, 139-142	3.1	14
84	Magnetic properties of Zn-substituted Co-Ge-Fe-O ferrites near the dilution limit. *Journal of Magnetism and Magnetic Materials*, **1991**, 99, 275-279	2.8	14
83	Simultaneous Individual and Dipolar Collective Properties in Binary Assemblies of Magnetic Nanoparticles. *Chemistry of Materials*, **2020**, 32, 969-981	9.6	13
82	Coercivity Modulation in Fe-Cu Pseudo-Ordered Porous Thin Films Controlled by an Applied Voltage: A Sustainable, Energy-Efficient Approach to Magnetoelectrically Driven Materials. *Advanced Science*, **2018**, 5, 1800499	13.6	13
81	Controlled generation of ferromagnetic martensite from paramagnetic austenite in AISI 316L austenitic stainless steel. *Journal of Materials Research*, **2009**, 24, 565-573	2.5	13
80	Atomic-Scale Determination of Cation Inversion in Spinel-Based Oxide Nanoparticles. *Nano Letters*, **2018**, 18, 5854-5861	11.5	13
79	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	7.7	12
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77	Discrimination between coupling and anisotropy fields in exchange-biased bilayers. *Journal of Applied Physics*, **2009**, 105, 053903	2.5	12
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75	Paramagnetic behavior and correlation between high- and low-temperature structural and magnetic transitions in La1□SrxMnO3 (x~1/8) single-crystal perovskites. *Physical Review B*, **2001**, 64,	3.3	12
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