Josep Nogues

List of Publications by Year in Descending Order

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	Elastic plasmonic-enhanced Fabry-Perot cavities with ultrasensitive stretching tunability. *Advanced Materials*, **2021**, e2106731	24	1
247	Ultrabroadband light absorbing Fe/polymer flexible metamaterial for soft opto-mechanical devices. *Applied Materials Today*, **2021**, 23, 101052	6.6	5
246	Probing the meta-stability of oxide core/shell nanoparticle systems at atomic resolution. *Chemical Engineering Journal*, **2021**, 405, 126820	14.7	4
245	Direct Evidence of a Graded Magnetic Interface in Bimagnetic Core/Shell Nanoparticles Using Electron Magnetic Circular Dichroism (EMCD). *Nano Letters*, **2021**, 21, 6923-6930	11.5	2
244	Mechanochromic Detection for Soft Opto-Magnetic Actuators. *ACS Applied Materials & Interfaces*, **2021**, 13, 47871-47881	9.5	1
243	Local manipulation of metamagnetism by strain nanopatterning. *Materials Horizons*, **2020**, 7, 2056-2062	14.4	5
242	Simultaneous Individual and Dipolar Collective Properties in Binary Assemblies of Magnetic Nanoparticles. *Chemistry of Materials*, **2020**, 32, 969-981	9.6	13
241	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
240	Voltage-driven motion of nitrogen ions: a new paradigm for magneto-ionics. *Nature Communications*, **2020**, 11, 5871	17.4	26
239	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
238	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
237	Zinc blende and wurtzite CoO polymorph nanoparticles: Rational synthesis and commensurate and incommensurate magnetic order. *Applied Materials Today*, **2019**, 16, 322-331	6.6	3
236	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
235	Unravelling the Elusive Antiferromagnetic Order in Wurtzite and Zinc Blende CoO Polymorph Nanoparticles. *Small*, **2018**, 14, e1703963	11	7
234	Tunable Magnetism in Nanoporous CuNi Alloys by Reversible Voltage-Driven Element-Selective Redox Processes. *Small*, **2018**, 14, e1704396	11	14
233	Enhanced Ultrafast Nonlinear Optical Response in Ferrite Core/Shell Nanostructures with Excellent Optical Limiting Performance. *Small*, **2018**, 14, 1701001	11	38
232	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

231	Magnetically amplified photothermal therapies and multimodal imaging with magneto-plasmonic nanodomes. *Applied Materials Today*, **2018**, 12, 430-440	6.6	15
230	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
229	Voltage-Controlled ON-OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film. *ACS Nano*, **2018**, 12, 10291-10300	16.7	47
228	Atomic-Scale Determination of Cation Inversion in Spinel-Based Oxide Nanoparticles. *Nano Letters*, **2018**, 18, 5854-5861	11.5	13
227	Simultaneous Local Heating/Thermometry Based on Plasmonic Magnetochromic Nanoheaters. *Small*, **2018**, 14, e1800868	11	24
226	Combining X-Ray Whole Powder Pattern Modeling, Rietveld and Pair Distribution Function Analyses as a Novel Bulk Approach to Study Interfaces in Heteronanostructures: Oxidation Front in FeO/Fe O Core/Shell Nanoparticles as a Case Study. *Small*, **2018**, 14, e1800804	11	8
225	Lateral Magnetically Modulated Multilayers by Combining Ion Implantation and Lithography. *Small*, **2017**, 13, 1603465	11	9
224	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
223	Magnetically-actuated mesoporous nanowires for enhanced heterogeneous catalysis. *Applied Catalysis B: Environmental*, **2017**, 217, 81-91	21.8	19
222	Seeded Growth Synthesis of Au□e3O4 Heterostructured Nanocrystals: Rational Design and Mechanistic Insights. *Chemistry of Materials*, **2017**, 29, 4022-4035	9.6	53
221	Unveiling a New High-Temperature Ordered Magnetic Phase in □Fe2O3. *Chemistry of Materials*, **2017**, 29, 9705-9713	9.6	32
220	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
219	Remanence Plots as a Probe of Spin Disorder in Magnetic Nanoparticles. *Chemistry of Materials*, **2017**, 29, 8258-8268	9.6	45
218	Voltage-Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energy-Efficient Magnetic Actuation. *Advanced Functional Materials*, **2017**, 27, 1701904	15.6	31
217	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
216	Spontaneous formation of spiral-like patterns with distinct periodic physical properties by confined electrodeposition of Co-In disks. *Scientific Reports*, **2016**, 6, 30398	4.9	8
215	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
214	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

213	Electrochemically synthesized amorphous and crystalline nanowires: dissimilar nanomechanical behavior in comparison with homologous flat films. *Nanoscale*, **2016**, 8, 1344-51	7.7	11
212	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
211	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
210	Modeling the collective magnetic behavior of highly-packed arrays of multi-segmented nanowires. *New Journal of Physics*, **2016**, 18, 013026	2.9	16
209	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
208	A new reversal mode in exchange coupled antiferromagnetic/ferromagnetic disks: distorted viscous vortex. *Nanoscale*, **2015**, 7, 9878-85	7.7	16
207	Enhanced magnetic properties in antiferromagnetic-core/ferrimagnetic-shell nanoparticles. *Scientific Reports*, **2015**, 5, 9609	4.9	66
206	Applications of exchange coupled bi-magnetic hard/soft and soft/hard magnetic core/shell nanoparticles. *Physics Reports*, **2015**, 553, 1-32	27.7	310
205	High Temperature Magnetic Stabilization of Cobalt Nanoparticles by an Antiferromagnetic Proximity Effect. *Physical Review Letters*, **2015**, 115, 057201	7.4	55
204	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
203	Oxide Wizard: an EELS application to characterize the white lines of transition metal edges. *Microscopy and Microanalysis*, **2014**, 20, 698-705	0.5	35
202	A combinatorial study of the mechanical and magnetic properties of a gradually nitrided austenitic stainless steel single crystal. *CrystEngComm*, **2014**, 16, 3515-3520	3.3	6
201	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
200	Direct evidence for an interdiffused intermediate layer in bi-magnetic core-shell nanoparticles. *Nanoscale*, **2014**, 6, 11911-20	7.7	39
199	One-pot electrosynthesis of multi-layered magnetic metallopolymer nanocomposites. *Nanoscale*, **2014**, 6, 4683-90	7.7	9
198	Atomic-Resolution Monitoring of Structural Phase Transition in Bi-magnetic Core/Shell Oxide Nanoparticles. *Microscopy and Microanalysis*, **2014**, 20, 106-107	0.5	
197	Interdependence between training and magnetization reversal in granular Co-CoO exchange bias systems. *Physical Review B*, **2014**, 89,	3.3	17
196	Mesoporous Oxide-Diluted Magnetic Semiconductors Prepared by Co Implantation in Nanocast 3D-Ordered In2O3 Materials. *Journal of Physical Chemistry C*, **2013**, 117, 17084-17091	3.8	14

195	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
194	Correlating material-specific layers and magnetic distributions within onion-like Fe3O4/MnO/Mn2O3 core/shell nanoparticles. *Journal of Applied Physics*, **2013**, 113, 17B531	2.5	18
193	Magnetic properties of single crystalline expanded austenite obtained by plasma nitriding of austenitic stainless steel single crystals. *ACS Applied Materials & Interfaces*, **2013**, 5, 10118-26	9.5	11
192	Robust antiferromagnetic coupling in hard-soft bi-magnetic core/shell nanoparticles. *Nature Communications*, **2013**, 4, 2960	17.4	132
191	Ordered arrays of ferromagnetic, compositionally graded Cu1-xNix alloy nanopillars prepared by template-assisted electrodeposition. *Journal of Materials Chemistry C*, **2013**, 1, 7215	7.1	11
190	Resolving material-specific structures within Fe-Mn-core|shell nanoparticles using anomalous small-angle X-ray scattering. *ACS Nano*, **2013**, 7, 921-31	16.7	35
189	Improving the magnetic properties of Co-CoO systems by designed oxygen implantation profiles. *ACS Applied Materials & Interfaces*, **2013**, 5, 4320-7	9.5	20
188	Controlled 3D-coating of the pores of highly ordered mesoporous antiferromagnetic Co3O4 replicas with ferrimagnetic Fe(x)Co(3-x)O4 nanolayers. *Nanoscale*, **2013**, 5, 5561-7	7.7	12
187	Polarizability and magnetoplasmonic properties of magnetic general nanoellipsoids. *Optics Express*, **2013**, 21, 9875-89	3.3	31
186	Poster: Spin-Related Phenomena **2013**, 589-632		
185	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
184	Mesoscopic model for the simulation of large arrays of bi-magnetic core/shell nanoparticles. *Advanced Materials*, **2012**, 24, 4331-6	24	37
183	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
182	Peculiar Electrical and Magnetic Properties of La(Ba)MnO3 Thin Films. *Transactions of the Materials Research Society of Japan*, **2012**, 20thAnniv, 65-76	0.2	1
181	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
180	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
179	Role of anisotropy configuration in exchange-biased systems. *Journal of Applied Physics*, **2011**, 109, 07D739	2.5	21
178	Designer magnetoplasmonics with nickel nanoferromagnets. *Nano Letters*, **2011**, 11, 5333-8	11.5	173

177	Role of the oxygen partial pressure in the formation of composite Co-CoO nanoparticles by reactive aggregation. *Journal of Nanoparticle Research*, **2011**, 13, 4583-4590	2.3	6
176	Plasmonic nickel nanoantennas. *Small*, **2011**, 7, 2341-7	11	150
175	Graded Anisotropy FePtCu Films. *IEEE Transactions on Magnetics*, **2011**, 47, 1580-1586	2	8
174	Tuneable magnetic patterning of paramagnetic Fe60Al40 (at. %) by consecutive ion irradiation through pre-lithographed shadow masks. *Journal of Applied Physics*, **2011**, 109, 093918	2.5	8
173	Probing vertically graded anisotropy in FePtCu films. *Physical Review B*, **2011**, 84,	3.3	27
172	Nanostructured MnGa films on Si/SiO2 with 20.5 kOe room temperature coercivity. *Journal of Applied Physics*, **2011**, 110, 093902	2.5	37
171	Making flexible magnetic aerogels and stiff magnetic nanopaper using cellulose nanofibrils as templates. *Nature Nanotechnology*, **2010**, 5, 584-8	28.7	684
170	Synthesis of compositionally graded nanocast NiO/NiCo2O4/Co3O4 mesoporous composites with tunable magnetic properties. *Journal of Materials Chemistry*, **2010**, 20, 7021		73
169	Out-of-plane magnetic patterning on austenitic stainless steels using plasma nitriding. *Applied Physics Letters*, **2010**, 96, 242509	3.4	9
168	Magnetic Measurements as a Sensitive Tool for Studying Dehydrogenation Processes in Hydrogen Storage Materials. *Journal of Physical Chemistry C*, **2010**, 114, 16818-16822	3.8	2
167	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
166	Continuously graded anisotropy in single (Fe53Pt47)100⊠Cux films. *Applied Physics Letters*, **2010**, 97, 182504	3.4	50
165	First-order reversal curve analysis of graded anisotropy FePtCu films. *Applied Physics Letters*, **2010**, 97, 202501	3.4	31
164	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
163	Exchange-bias-like effect inLl0(111) FePt based pseudo spin valves. *Journal of Physics: Conference Series*, **2010**, 200, 072110	0.3	
162	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
161	Size-dependent magnetic behavior and spin-wave gap in MnF2 epitaxial films with orthorhombic crystal structure. *Journal of Magnetism and Magnetic Materials*, **2010**, 322, 664-667	2.8	7
160	Out-of-plane magnetic patterning based on indentation-induced nanocrystallization of a metallic glass. *Small*, **2010**, 6, 1543-9	11	16

159	Magnetic proximity effect features in antiferromagnetic/ferrimagnetic core-shell nanoparticles. *Physical Review Letters*, **2009**, 102, 247201	7.4	74
158	Emergence of noncollinear anisotropies from interfacial magnetic frustration in exchange-bias systems. *Physical Review B*, **2009**, 80,	3.3	100
157	Nonzero orbital moment in high coercivity ?-Fe2O3 and low-temperature collapse of the magnetocrystalline anisotropy. *Physical Review B*, **2009**, 79,	3.3	88
156	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
155	Highly asymmetric magnetic behavior in exchange biased systems induced by noncollinear field cooling. *Applied Physics Letters*, **2009**, 95, 122508	3.4	50
154	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
153	Direct evidence of imprinted vortex states in the antiferromagnet of exchange biased microdisks. *Applied Physics Letters*, **2009**, 95, 012510	3.4	20
152	Exchange Bias in $L1_0$ (111)-Oriented FePt-Based Pseudo Spin Valves. *IEEE Transactions on Magnetics*, **2009**, 45, 3881-3884	2	10
151	Assessment of catalyst particle removal in multi-wall carbon nanotubes by highly sensitive magnetic measurements. *Carbon*, **2009**, 47, 758-763	10.4	9
150	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
149	Discrimination between coupling and anisotropy fields in exchange-biased bilayers. *Journal of Applied Physics*, **2009**, 105, 053903	2.5	12
148	Magnetization reversal in circularly exchange-biased ferromagnetic disks. *Physical Review B*, **2009**, 79,	3.3	32
147	Direct magnetic patterning due to the generation of ferromagnetism by selective ion irradiation of paramagnetic FeAl alloys. *Small*, **2009**, 5, 229-34	11	63
146	Enhanced exchange bias effects in a nanopatterned system consisting of two perpendicularly coupled ferromagnets. *Applied Physics Letters*, **2008**, 92, 022508	3.4	10
145	Cubic versus spherical magnetic nanoparticles: the role of surface anisotropy. *Journal of the American Chemical Society*, **2008**, 130, 13234-9	16.4	196
144	Exchange-Biased Magnetic Vortices. *IEEE Transactions on Magnetics*, **2008**, 44, 1968-1973	2	12
143	Patterning of magnetic structures on austenitic stainless steel by local ion beam nitriding. *Acta Materialia*, **2008**, 56, 4570-4576	8.4	16
142	Two-fold origin of the deformation-induced ferromagnetism in bulk Fe60Al40(at.%) alloys. *New Journal of Physics*, **2008**, 10, 103030	2.9	20

141	A Numerical Algorithm for Magnetohydrodynamics of Ablated Materials. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 3674-3685	1.3	9
140	Ion mass dependence of irradiation-induced local creation of ferromagnetism in Fe60Al40 alloys. *Physical Review B*, **2008**, 77,	3.3	36
139	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
138	Tailoring the magnetization reversal of elliptical dots using exchange bias (invited). *Journal of Applied Physics*, **2008**, 103, 07C109	2.5	11
137	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
136	Cold Consolidation of Metal–Ceramic Nanocomposite Powders with Large Ceramic Fractions. *Advanced Functional Materials*, **2008**, 18, 3293-3298	15.6	27
135	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
134	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
133	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
132	Mössbauer spectroscopical investigation of the exchange biased Fe/MnF2 interface. *Hyperfine Interactions*, **2007**, 169, 1371-1377	0.8	10
131	Strong temperature dependence of antiferromagnetic coupling in CoFeB/Ru/CoFeB. *Europhysics Letters*, **2007**, 78, 67002	1.6	9
130	Magnetic instability regions in patterned structures: influence of element shape on magnetization reversal dynamics. *Physical Review Letters*, **2007**, 98, 147202	7.4	18
129	Microstructural evolution during solid-state sintering of ball-milled nanocomposite WC–10 mass% Co powders. *Nanotechnology*, **2007**, 18, 185609	3.4	8
128	Tailoring deformation-induced effects in Co powders by milling them with Al2O3. *Journal of Materials Research*, **2007**, 22, 2998-3005	2.5	5
127	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
126	Exchange Bias in Ferromagnetic Nanoparticles Embedded in an Antiferromagnetic Matrix. *ChemInform*, **2006**, 37, no		1
125	Direct Synthesis of Isolated L10 FePt Nanoparticles in a Robust TiO2 Matrix via a Combined Sol–Gel/Pyrolysis Route. *Advanced Materials*, **2006**, 18, 466-470	24	32
124	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

123	Imprinting vortices into antiferromagnets. *Physical Review Letters*, **2006**, 97, 067201	7.4	43
122	Selective generation of local ferromagnetism in austenitic stainless steel using nanoindentation. *Applied Physics Letters*, **2006**, 89, 032509	3.4	27
121	Volume expansion contribution to the magnetism of atomically disordered intermetallic alloys. *Physical Review B*, **2006**, 74,	3.3	56
120	Controlling magnetic vortices through exchange bias. *Applied Physics Letters*, **2006**, 88, 042502	3.4	21
119	Magneto-optical study of magnetization reversal asymmetry in exchange bias. *Applied Physics Letters*, **2006**, 89, 202512	3.4	33
118	Shell-driven magnetic stability in core-shell nanoparticles. *Physical Review Letters*, **2006**, 97, 157203	7.4	179
117	Magnetic order in an MnF2 epitaxial layer with the orthorhombic structure. *JETP Letters*, **2006**, 83, 152-155	1.1	8
116	Iron filled single-wall carbon nanotubes □A novel ferromagnetic medium. *Chemical Physics Letters*, **2006**, 421, 129-133	2.5	118
115	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
114	Spin polarized itinerant electrons in Ca2FeMoO6 double perovskites. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 126, 279-282	3.1	8
113	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
112	M□sbauer spectroscopical investigation of the exchange biased Fe/MnF2 interface **2006**, 1371-1377		1
111	Exchange bias in ferromagnetic nanoparticles embedded in an antiferromagnetic matrix. *International Journal of Nanotechnology*, **2005**, 2, 23	1.5	74
110	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
109	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
108	Large coercivity and low-temperature magnetic reorientation in □Fe2O3 nanoparticles. *Journal of Applied Physics*, **2005**, 98, 044307	2.5	85
107	Origin of the asymmetric magnetization reversal behavior in exchange-biased systems: competing anisotropies. *Physical Review Letters*, **2005**, 95, 057204	7.4	234
106	Exchange bias in nanostructures. *Physics Reports*, **2005**, 422, 65-117	27.7	1563

105	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	2.8	25
104	Exploiting Length Scales of Exchange-Bias Systems to Fully Tailor Double-Shifted Hysteresis Loops. *Advanced Materials*, **2005**, 17, 2978-2983	24	89
103	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
102	Exchange bias in antiferromagnetic-ferromagnetic-antiferromagnetic structures with out-of-plane magnetization. *Physical Review B*, **2005**, 72,	3.3	29
101	Magnetization reversal in submicron disks: exchange biased vortices. *Physical Review Letters*, **2005**, 95, 067201	7.4	55
100	Enhanced ferromagnetic interactions in electron doped NdxSr2´xFeMoO6double perovskites. *Journal of Physics Condensed Matter*, **2004**, 16, 3173-3182	1.8	41
99	Changes in ferromagnetic spin structure induced by exchange bias in Fe/MnF2 films. *Physical Review B*, **2004**, 70,	3.3	36
98	Exchange bias effects in Fe nanoparticles embedded in an antiferromagnetic Cr2O3matrix. *Nanotechnology*, **2004**, 15, S211-S214	3.4	58
97	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
96	Ultraporous single phase iron oxide-silica nanostructured aerogels from ferrous precursors. *Langmuir*, **2004**, 20, 1425-9	4	28
95	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
94	Optimized Synthesis of the Elusive □Fe2O3 Phase via Sol□el Chemistry. *Chemistry of Materials*, **2004**, 16, 5542-5548	9.6	117
93	Role of stacking faults in the structural and magnetic properties of ball-milled cobalt. *Physical Review B*, **2003**, 68,	3.3	51
92	Magnetic interaction effects on the hard magnetic properties of ball-milled SmCo5+NiO and SmCo5+CoO composites: A □M plot study. *Journal of Applied Physics*, **2003**, 93, 8140-8142	2.5	5
91	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
90	Ordered magnetic nanostructures: fabrication and properties. *Journal of Magnetism and Magnetic Materials*, **2003**, 256, 449-501	2.8	801
89	Beating the superparamagnetic limit with exchange bias. *Nature*, **2003**, 423, 850-3	50.4	1335
88	Isothermal tuning of exchange bias using pulsed fields. *Applied Physics Letters*, **2003**, 82, 3044-3046	3.4	46

87	Microstructural aspects of the hcp-fcc allotropic phase transformation induced in cobalt by ball milling. *Philosophical Magazine*, **2003**, 83, 439-455	1.6	64
86	High-coercivity ultralight transparent magnets. *Applied Physics Letters*, **2003**, 82, 4307-4309	3.4	26
85	Coercivity Enhancement in Ball-Milled and Heat-Treated Sr-Ferrite with Iron Sulphide. *Journal of Metastable and Nanocrystalline Materials*, **2003**, 15-16, 599-606	0.2	7
84	Tailoring the exchange bias via shape anisotropy in ferromagnetic/antiferromagnetic exchange-coupled systems. *Physical Review B*, **2003**, 67,	3.3	73
83	High anisotropy SmCo nanoparticles: Preparation by cluster gun technique and their magnetic properties. *Journal of Applied Physics*, **2003**, 93, 7592-7594	2.5	48
82	Antisites and electron-doping effects on the magnetic transition of Sr2FeMoO6 double perovskite. *Physical Review B*, **2003**, 67,	3.3	127
81	Origin of complex exchange anisotropy in Fe/MnF2 bilayers. *Physical Review B*, **2003**, 68,	3.3	36
80	Effect of magnetic interactions on the magnetic properties of ball-milled SmCo5+NiO powders. *Journal of Magnetism and Magnetic Materials*, **2002**, 242-245, 1287-1289	2.8	5
79	Improving the energy product of hard magnetic materials. *Physical Review B*, **2002**, 65,	3.3	98
78	Fabrication and thermal stability of arrays of Fe nanodots. *Applied Physics Letters*, **2002**, 81, 4434-4436	3.4	103
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