

# Jian-Ping Wang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

182  
papers

4,896  
citations

38  
h-index

63  
g-index

193  
ext. papers

5,874  
ext. citations

4.7  
avg, IF

6.1  
L-index

#	Paper	IF	Citations
182	Ferromagnetic resonance and magnetization switching characteristics of perpendicular magnetic tunnel junctions with synthetic antiferromagnetic free layers. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 012404	3.4	2
181	Bipolar Electric-Field Switching of Perpendicular Magnetic Tunnel Junctions through Voltage-Controlled Exchange Coupling.. <i>Nano Letters</i> , <b>2022</b> ,	11.5	2
180	Bipolar Random Spike and Bipolar Random Number Generation by Two Magnetic Tunnel Junctions. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-6	2.9	1
179	Large unidirectional spin Hall and Rashba-Edelstein magnetoresistance in topological insulator/magnetic insulator heterostructures. <i>Applied Physics Reviews</i> , <b>2022</b> , 9, 011406	17.3	2
178	Study of $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> Annealing Process Through Molecular Dynamics Modeling. <i>Minerals, Metals and Materials Series</i> , <b>2022</b> , 109-117	0.3	
177	Giant Magnetoresistance Biosensors in Biomedical Applications.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	5
176	Magnetocrystalline anisotropy in $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> and Cu-doped Fe <sub>3</sub> O <sub>4</sub> . <i>AIP Advances</i> , <b>2022</b> , 12, 035020	1.5	0
175	Magnetic nanoparticles and magnetic particle spectroscopy-based bioassays: a 15 year recap. <i>Nano Futures</i> , <b>2022</b> , 6, 022001	3.6	1
174	Enhancement of voltage controlled magnetic anisotropy (VCMA) through electron depletion. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 153904	2.5	0
173	Giant Anomalous Hall Effect due to Double-Degenerate Quasiflat Bands. <i>Physical Review Letters</i> , <b>2021</b> , 126, 106601	7.4	4
172	Stable and Monodisperse Iron Nitride Nanoparticle Suspension for Magnetic Diagnosis and Treatment: Development of Synthesis and Surface Functionalization Strategies. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 4409-4418	5.6	1
171	Influence of Total Ionizing Dose on Magnetic Tunnel Junctions With Perpendicular Anisotropy. <i>IEEE Transactions on Nuclear Science</i> , <b>2021</b> , 68, 748-755	1.7	1
170	Magnetic Particle Spectroscopy with One-Stage Lock-In Implementation for Magnetic Bioassays with Improved Sensitivities. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 17221-17231	3.8	2
169	. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-39	2	34
168	Charge trapping analysis in sputtered Bi <sub>2</sub> Se <sub>3</sub> -x based accumulation-mode FETs. II. Gate capacitance characteristics. <i>AIP Advances</i> , <b>2021</b> , 11, 015221	1.5	
167	Magnetocrystalline anisotropy of $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> under various DFT approaches. <i>AIP Advances</i> , <b>2021</b> , 11, 015039	1.5	3
166	Exploring the Feasibility of Using 3-D XPoint as an In-Memory Computing Accelerator. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2021</b> , 1-1	2.4	1

165	Influence of size and shape on key performance metrics in spin-torque oscillators. <i>AIP Advances</i> , <b>2021</b> , 11, 025215	1.5	
164	A Portable Magnetic Particle Spectrometer for Future Rapid and Wash-Free Bioassays. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 7966-7976	9.5	6
163	Investigation of Commercial Iron Oxide Nanoparticles: Structural and Magnetic Property Characterization. <i>ACS Omega</i> , <b>2021</b> , 6, 6274-6283	3.9	7
162	Buffer layer engineering of L10 FePd thin films with large perpendicular magnetic anisotropy. <i>AIP Advances</i> , <b>2021</b> , 11, 025106	1.5	2
161	Surface acoustic wave induced modulation of tunneling magnetoresistance in magnetic tunnel junctions. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 033901	2.5	1
160	Voltage control of ferrimagnetic order and voltage-assisted writing of ferrimagnetic spin textures. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 981-988	28.7	16
159	Determining the coercivity of anisotropic Heisenberg magnets by Monte Carlo sampling: Application to the design of permanent magnets. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2021</b> , 531, 167928	2.8	
158	Large Superparamagnetic FeCo Nanocubes for Magnetic Theranostics. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 9382-9390	5.6	2
157	One-Step, Wash-free, Nanoparticle Clustering-Based Magnetic Particle Spectroscopy Bioassay Method for Detection of SARS-CoV-2 Spike and Nucleocapsid Proteins in the Liquid Phase. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 44136-44146	9.5	10
156	. <i>IEEE Magnetics Letters</i> , <b>2021</b> , 12, 1-5	1.6	2
155	Perpendicular magnetic tunnel junctions with multi-interface free layer. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 242404	3.4	2
154	Ferromagnetic phase of the spinel compound MgV <sub>2</sub> O <sub>4</sub> and its spintronics properties. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
153	Magnetic Particle Spectroscopy: A Short Review of Applications Using Magnetic Nanoparticles. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 4972-4989	5.6	36
152	Theory of Quantum Computation With Magnetic Clusters. <i>IEEE Transactions on Quantum Engineering</i> , <b>2020</b> , 1, 1-8	2.9	1
151	A DNA Read Alignment Accelerator Based on Computational RAM. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2020</b> , 6, 80-88	2.4	3
150	Voltage-Controlled Antiferromagnetism in Magnetic Tunnel Junctions. <i>Physical Review Letters</i> , <b>2020</b> , 124, 187701	7.4	6
149	Spin pumping and large field-like torque at room temperature in sputtered amorphous WTe <sub>2</sub> films. <i>APL Materials</i> , <b>2020</b> , 8, 041102	5.7	10
148	Shape anisotropy effects on spin-torque oscillators. <i>AIP Advances</i> , <b>2020</b> , 10, 045101	1.5	2

147	Irregularly Shaped Iron Nitride Nanoparticles as a Potential Candidate for Biomedical Applications: From Synthesis to Characterization. <i>ACS Omega</i> , <b>2020</b> , 5, 11756-11767	3.9	8
146	Spin current nano-oscillator (SCNO) as a potential frequency-based, ultra-sensitive magnetic biosensor: a simulation study. <i>Nanotechnology</i> , <b>2020</b> , 31, 375501	3.4	3
145	Magnetic Particle Spectroscopy for Detection of Influenza A Virus Subtype H1N1. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 13686-13697	9.5	32
144	Magnetic Weyl semimetals with diamond structure realized in spinel compounds. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	15
143	External-Field-Free Spin Hall Switching of Perpendicular Magnetic Nanopillar with a Dipole-Coupled Composite Structure. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 1901368	6.4	15
142	High-moment magnetic nanoparticles. <i>Journal of Nanoparticle Research</i> , <b>2020</b> , 22, 1	2.3	18
141	Charge trapping analysis in sputtered Bi <sub>x</sub> Se <sub>1-x</sub> based accumulation-mode FETs. <i>AIP Advances</i> , <b>2020</b> , 10, 015315	1.5	1
140	Deterministic field-free switching of a perpendicularly magnetized ferromagnetic layer via the joint effects of the Dzyaloshinskii-Moriya interaction and damping- and field-like spin-orbit torques: an appraisal. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 205002	3	19
139	Large-scale interlayer rotations and Te grain boundaries in (Bi,Sb) <sub>2</sub> Te <sub>3</sub> thin films. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	8
138	MOUSE: Inference In Non-volatile Memory for Energy Harvesting Applications <b>2020</b> ,		4
137	Carbon and Microstructure Effects on the Magnetic Properties of Fe <sub>3</sub> N Soft Magnetic Materials (Minnealloy). <i>Minerals, Metals and Materials Series</i> , <b>2020</b> , 1841-1852	0.3	
136	Critical thickness of $\gamma$ -Fe <sub>16</sub> N <sub>2</sub> layer prepared in low-temperature nitriding. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 223902	2.5	6
135	Magnetic field enhanced coercivity of Fe nanoparticles embedded in antiferromagnetic MnN films. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 035003	3	2
134	Synthesis of $\gamma$ -Fe <sub>16</sub> N <sub>2</sub> foils with an ultralow temperature coefficient of coercivity for rare-earth-free magnets. <i>Acta Materialia</i> , <b>2020</b> , 184, 143-150	8.4	14
133	Permanent magnet design assisted by antiferromagnet-ferromagnet interface coupling: A Monte Carlo study. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 500, 166360	2.8	1
132	Magnetic-Nanosensor-Based Virus and Pathogen Detection Strategies before and during COVID-19. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 9560-9580	5.6	38
131	Analyzing the Effects of Interconnect Parasitics in the STT CDRAM In-Memory Computational Platform. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2020</b> , 6, 71-79	2.4	2
130	Low Gilbert damping and high thermal stability of Ru-seeded L1-phase FePd perpendicular magnetic thin films at elevated temperatures. <i>Applied Physics Letters</i> , <b>2020</b> , 117,	3.4	7

129	Effects of mobile oxygen ions in top-gated synthetic antiferromagnet structure. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 202405	3.4	1
128	High-Yield Gas-Phase Condensation Synthesis of Nanoparticles to Enable a Wide Array of Applications. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 7942-7949	5.6	3
127	High-frequency magnetoacoustic resonance through strain-spin coupling in perpendicular magnetic multilayers. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	10
126	Magnetic structure of Fe <sub>16</sub> N <sub>2</sub> determined by polarized neutron diffraction on thin-film samples. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
125	Environment-friendly bulk Fe <sub>16</sub> N <sub>2</sub> permanent magnet: Review and prospective. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 497, 165962	2.8	22
124	Magnetic nanoparticles in nanomedicine: a review of recent advances. <i>Nanotechnology</i> , <b>2019</b> , 30, 502003	3.4	164
123	Spin-Orbit Torque and Spin Hall Effect-Based Cellular Level Therapeutic Spintronic Neuromodulator: A Simulation Study. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 24963-24972	3.8	1
122	Detection of Influenza A Virus in Swine Nasal Swab Samples With a Wash-Free Magnetic Bioassay and a Handheld Giant Magnetoresistance Sensing System. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 1077	5.7	34
121	Nitriding and martensitic phase transformation of the copper and boron doped iron nitride magnet. <i>Acta Materialia</i> , <b>2019</b> , 167, 80-88	8.4	7
120	Magnetic Nanoparticle Relaxation Dynamics-Based Magnetic Particle Spectroscopy for Rapid and Wash-Free Molecular Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 22979-22986	9.5	25
119	Investigating the effect of magnetic dipole-dipole interaction on magnetic particle spectroscopy: implications for magnetic nanoparticle-based bioassays and magnetic particle imaging. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52, 335002	3	16
118	Heavy-Metal-Free, Low-Damping, and Non-Interface Perpendicular Fe <sub>16</sub> N <sub>2</sub> Thin Film and Magnetoresistance Device. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2019</b> , 13, 1900089	2.5	10
117	High saturation magnetization and low magnetic anisotropy Fe-CN martensite thin film. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 152401	3.4	7
116	Using Spin-Hall MTJs to Build an Energy-Efficient In-memory Computation Platform <b>2019</b> ,		17
115	Room-temperature spin-to-charge conversion in sputtered bismuth selenide thin films via spin pumping from yttrium iron garnet. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 102401	3.4	14
114	Magnetic particle spectroscopy-based bioassays: methods, applications, advances, and future opportunities. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52, 173001	3	34
113	In-Memory Processing on the Spintronic CRAM: From Hardware Design to Application Mapping. <i>IEEE Transactions on Computers</i> , <b>2019</b> , 68, 1159-1173	2.5	40
112	Tunable magnetic skyrmions in spintronic nanostructures for cellular-level magnetic neurostimulation. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52, 465002	3	3

111	Observation of High Spin-to-Charge Conversion by Sputtered Bismuth Selenide Thin Films at Room Temperature. <i>Nano Letters</i> , <b>2019</b> , 19, 4836-4844	11.5	18
110	Synthesis of $\text{Pb-Fe}_{16}\text{N}_2$ ribbons with a porous structure. <i>Nanoscale Advances</i> , <b>2019</b> , 1, 1337-1342	5.1	13
109	Tunable charge to spin conversion in strontium iridate thin films. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	17
108	Advances in Magnetoresistive Biosensors. <i>Micromachines</i> , <b>2019</b> , 11,	3.3	26
107	Spintronic In-Memory Pattern Matching. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2019</b> , 5, 206-214	2.4	3
106	Experimental Demonstration of Probabilistic Spin Logic by Magnetic Tunnel Junctions. <i>IEEE Magnetism Letters</i> , <b>2019</b> , 10, 1-5	1.6	11
105	Independent Control of Antiparallel- and Parallel-State Thermal Stability Factors in Magnetic Tunnel Junctions for Telegraphic Signals With Two Degrees of Tunability. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 5353-5359	2.9	5
104	New insight on the Mössbauer spectra for $\text{Fe}_{16}\text{N}_2$ thin films with high saturation magnetization. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, 120907	1.4	3
103	Tunable magnetic domain walls for therapeutic neuromodulation at cellular level: Stimulating neurons through magnetic domain walls. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 183902	2.5	3
102	Development of a multiplexed giant magnetoresistive biosensor array prototype to quantify ovarian cancer biomarkers. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 126, 301-307	11.8	41
101	Large-area GMR bio-sensors based on reverse nucleation switching mechanism. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2019</b> , 473, 484-489	2.8	10
100	Estimating saturation magnetization of superparamagnetic nanoparticles in liquid phase. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2019</b> , 471, 394-399	2.8	4
99	Annealing Temperature Effects on Spin Hall Magnetoresistance in Perpendicularly Magnetized W/CoFeB Bilayers. <i>IEEE Transactions on Magnetism</i> , <b>2019</b> , 55, 1-4	2	3
98	L10 $\text{FePd}$ Synthetic Antiferromagnet through an fcc Ru Spacer Utilized for Perpendicular Magnetic Tunnel Junctions. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	11
97	Enhancement of tunneling magnetoresistance by inserting a diffusion barrier in L10- $\text{FePd}$ perpendicular magnetic tunnel junctions. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 152401	3.4	10
96	Nanotechnology: Review of concepts and potential application of sensing platforms in food safety. <i>Food Microbiology</i> , <b>2018</b> , 75, 47-54	6	93
95	Unidirectional spin-Hall and Rashba-Edelstein magnetoresistance in topological insulator-ferromagnet layer heterostructures. <i>Nature Communications</i> , <b>2018</b> , 9, 111	17.4	55
94	Weak antilocalization and low-temperature characterization of sputtered polycrystalline bismuth selenide. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 122402	3.4	12

93	Efficient In-Memory Processing Using Spintronics. <i>IEEE Computer Architecture Letters</i> , <b>2018</b> , 17, 42-46	1.8	33
92	Room-temperature high spin-orbit torque due to quantum confinement in sputtered BiSe films. <i>Nature Materials</i> , <b>2018</b> , 17, 800-807	27	214
91	Epitaxial Fe <sub>16</sub> N <sub>2</sub> thin film on nonmagnetic seed layer. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 192402	3.4	7
90	Iron nanoparticles with tunable tetragonal structure and magnetic properties. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	11
89	Magnetic Nanoparticle-Based Biosensing <b>2018</b> , 247-270		1
88	Field-free switching of a perpendicular magnetic tunnel junction through the interplay of spin-orbit and spin-transfer torques. <i>Nature Electronics</i> , <b>2018</b> , 1, 582-588	28.4	167
87	Evaluation of Operating Margin and Switching Probability of Voltage- Controlled Magnetic Anisotropy Magnetic Tunnel Junctions. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2018</b> , 4, 76-84	2.4	8
86	Telegraphic switching signals by magnet tunnel junctions for neural spiking signals with high information capacity. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 152121	2.5	14
85	Quantitative analysis and optimization of magnetization precession initiated by ultrafast optical pulses. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 162405	3.4	8
84	Low Gilbert Damping Constant in Perpendicularly Magnetized W/CoFeB/MgO Films with High Thermal Stability. <i>Scientific Reports</i> , <b>2018</b> , 8, 13395	4.9	33
83	High Performance MgO-barrier Magnetic Tunnel Junctions for Flexible and Wearable Spintronic Applications. <i>Scientific Reports</i> , <b>2017</b> , 7, 42001	4.9	53
82	Magnetic dynamics of ferrofluids: mathematical models and experimental investigations. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 085005	3	20
81	All-Optical Switching of Magnetic Tunnel Junctions with Single Subpicosecond Laser Pulses. <i>Physical Review Applied</i> , <b>2017</b> , 7,	4.3	49
80	A Pathway to Enable Exponential Scaling for the Beyond-CMOS Era <b>2017</b> ,		14
79	Characterizing Physical Properties of Superparamagnetic Nanoparticles in Liquid Phase Using Brownian Relaxation. <i>Small</i> , <b>2017</b> , 13, 1604135	11	23
78	Magnetic hyperthermia performance of magnetite nanoparticle assemblies under different driving fields. <i>AIP Advances</i> , <b>2017</b> , 7, 056327	1.5	28
77	Portable GMR Handheld Platform for the Detection of Influenza A Virus. <i>ACS Sensors</i> , <b>2017</b> , 2, 1594-1601	1.2	71
76	Minnealloy: a new magnetic material with high saturation flux density and low magnetic anisotropy. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 37LT01	3	8

75	Localized detection of reversal nucleation generated by high moment magnetic nanoparticles using a large-area magnetic sensor. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 123901	2.5	15
74	<b>2017</b> ,		17
73	Field-free spin-orbit torque switching of composite perpendicular CoFeB/Gd/CoFeB layers utilized for three-terminal magnetic tunnel junctions. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 012402	3.4	27
72	A Comparative Study Between Spin-Transfer-Torque and Spin-Hall-Effect Switching Mechanisms in PMTJ Using SPICE. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2017</b> , 3, 74-82	2.4	28
71	Scaling effect of spin-torque nano-oscillators. <i>AIP Advances</i> , <b>2017</b> , 7, 056624	1.5	6
70	Synthesis of $\text{Fe}_{16}\text{N}_2$ Compound Anisotropic Magnet by the Strained-Wire Method. <i>Physical Review Applied</i> , <b>2016</b> , 6,	4.3	16
69	Time-Resolved Magneto-Optical Kerr Effect of Magnetic Thin Films for Ultrafast Thermal Characterization. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 2328-32	6.4	25
68	Preparation of an $\text{Fe}_{16}\text{N}_2$ Magnet via a Ball Milling and Shock Compaction Approach. <i>Advanced Engineering Materials</i> , <b>2016</b> , 18, 1009-1016	3.5	25
67	In Vitro Viscosity Measurement on Superparamagnetic Nanoparticle Suspensions. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4	2	6
66	Magnetization Response Spectroscopy of Superparamagnetic Nanoparticles Under Mixing Frequency Fields. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4	2	5
65	Giant Magnetoresistance-based Biosensor for Detection of Influenza A Virus. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 400	5.7	98
64	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1600040	6.4	64
63	Giant voltage manipulation of MgO-based magnetic tunnel junctions via localized anisotropic strain: A potential pathway to ultra-energy-efficient memory technology. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 092403	3.4	61
62	DFT calculation and experimental investigation of Mn doping effect in $\text{Fe}_{16}\text{N}_2$ . <i>AIP Advances</i> , <b>2016</b> , 6, 056007	1.5	17
61	Magnetic properties of cubic FeCo nanoparticles with anisotropic long chain structure. <i>AIP Advances</i> , <b>2016</b> , 6, 056126	1.5	18
60	Synthesis of $\text{Fe}_{16}\text{N}_2$ compound Free-Standing Foils with 20 MGOe Magnetic Energy Product by Nitrogen Ion-Implantation. <i>Scientific Reports</i> , <b>2016</b> , 6, 25436	4.9	42
59	Giant magnetoresistive-based biosensing probe station system for multiplex protein assays. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 70, 61-8	11.8	57
58	Giant Spin Pumping and Inverse Spin Hall Effect in the Presence of Surface and Bulk Spin-Orbit Coupling of Topological Insulator $\text{Bi}_2\text{Se}_3$ . <i>Nano Letters</i> , <b>2015</b> , 15, 7126-32	11.5	200



57	Spin Hall switching of the magnetization in Ta/TbFeCo structures with bulk perpendicular anisotropy. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 132404	3.4	78
56	Superparamagnetic nanoparticle-based viscosity test. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 053701	3.4	22
55	A method to evaluate the Fe <sub>16</sub> N <sub>2</sub> volume ratio in FeN bulk material by XPS. <i>Materials Research Express</i> , <b>2015</b> , 2, 116103	1.7	8
54	A simulation study on superparamagnetic nanoparticle based multi-tracer tracking. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 173701	3.4	10
53	Biocompatible Fe-Si Nanoparticles with Adjustable Self-Regulation of Temperature for Medical Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 12649-54	9.5	17
52	Searching for high magnetization density in bulk Fe: the new metastable Fe <sub>16</sub> N <sub>2</sub> phase. <i>Journal of Physics Condensed Matter</i> , <b>2015</b> , 27, 016001	1.8	1
51	Evaluation of hyperthermia of magnetic nanoparticles by dehydrating DNA. <i>Scientific Reports</i> , <b>2014</b> , 4, 7216	4.9	25
50	External-field-free magnetic biosensor. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 122401	3.4	9
49	Surface modification and bioconjugation of FeCo magnetic nanoparticles with proteins. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2014</b> , 117, 449-56	6	11
48	Computing with spins and magnets. <i>MRS Bulletin</i> , <b>2014</b> , 39, 696-702	3.2	25
47	Magnetic detection of mercuric ion using giant magnetoresistance-based biosensing system. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 3712-6	7.8	38
46	Magnetic nanoparticles colourization by a mixing-frequency method. <i>Journal Physics D: Applied Physics</i> , <b>2014</b> , 47, 155001	3	22
45	Comparative analysis of several GMR strip sensor configurations for biological applications. <i>Sensors and Actuators A: Physical</i> , <b>2014</b> , 216, 349-354	3.9	11
44	Magnetoresistive performance and comparison of supermagnetic nanoparticles on giant magnetoresistive sensor-based detection system. <i>Scientific Reports</i> , <b>2014</b> , 4, 5716	4.9	63
43	Viscosity effect on the Brownian relaxation based detection for immunoassay applications. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 2769-72	0.9	4
42	Thermal stability of partially ordered Fe <sub>16</sub> N <sub>2</sub> film on non-magnetic Ag under layer. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 17A767	2.5	9
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38	Direct synthesis of large size ferromagnetic SmCo <sub>5</sub> nanoparticles by a gas-phase condensation method. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 134310	2.5	14
37	Magnetic nanoparticles of core-shell structure for recoverable photocatalysts. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 253102	3.4	7
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35	Precessional magnetization induced spin current from CoFeB into Ta. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 252409	3.4	26
34	The effect of strain induced by Ag underlayer on saturation magnetization of partially ordered Fe <sub>16</sub> N <sub>2</sub> thin films. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 242412	3.4	14
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28	Real-time measurement of Brownian relaxation of magnetic nanoparticles by a mixing-frequency method. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 213702	3.4	40
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25	A three-layer competition-based giant magnetoresistive assay for direct quantification of endoglin from human urine. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 2996-3002	7.8	45
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