

Jian-Ping Wang

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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	Magnetomicelles: composite nanostructures from magnetic nanoparticles and cross-linked amphiphilic block copolymers. <i>Nano Letters</i> , 2005 , 5, 1987-91	11.5	263
181	Spin transfer in nanomagnetic devices with perpendicular anisotropy. <i>Applied Physics Letters</i> , 2006 , 88, 172506	3.4	232
180	Room-temperature high spin-orbit torque due to quantum confinement in sputtered BiSe films. <i>Nature Materials</i> , 2018 , 17, 800-807	27	214
179	Giant Spin Pumping and Inverse Spin Hall Effect in the Presence of Surface and Bulk Spin-Orbit Coupling of Topological Insulator Bi ₂ Se ₃ . <i>Nano Letters</i> , 2015 , 15, 7126-32	11.5	200
178	Field-free switching of a perpendicular magnetic tunnel junction through the interplay of spin-orbit and spin-transfer torques. <i>Nature Electronics</i> , 2018 , 1, 582-588	28.4	167
177	Magnetic nanoparticles in nanomedicine: a review of recent advances. <i>Nanotechnology</i> , 2019 , 30, 502003	3.4	164
176	High-power coherent microwave emission from magnetic tunnel junction nano-oscillators with perpendicular anisotropy. <i>ACS Nano</i> , 2012 , 6, 6115-21	16.7	114
175	High-magnetic-moment core-shell-type FeCo/Au/Ag nanoparticles. <i>Applied Physics Letters</i> , 2005 , 87, 152502	3.4	112
174	A detection system based on giant magnetoresistive sensors and high-moment magnetic nanoparticles demonstrates zeptomole sensitivity: potential for personalized medicine. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 2764-7	16.4	103
173	Giant Magnetoresistance-based Biosensor for Detection of Influenza A Virus. <i>Frontiers in Microbiology</i> , 2016 , 7, 400	5.7	98
172	Nanotechnology: Review of concepts and potential application of sensing platforms in food safety. <i>Food Microbiology</i> , 2018 , 75, 47-54	6	93
171	FePt Magnetic Nanoparticles and Their Assembly for Future Magnetic Media. <i>Proceedings of the IEEE</i> , 2008 , 96, 1847-1863	14.3	83
170	Spin Hall switching of the magnetization in Ta/TbFeCo structures with bulk perpendicular anisotropy. <i>Applied Physics Letters</i> , 2015 , 106, 132404	3.4	78
169	Portable GMR Handheld Platform for the Detection of Influenza A Virus. <i>ACS Sensors</i> , 2017 , 2, 1594-1601	3.2	71
168	Programmable spintronics logic device based on a magnetic tunnel junction element. <i>Journal of Applied Physics</i> , 2005 , 97, 10D509	2.5	69
167	Fabrication of Fe_{16}N_2 Films by Sputtering Process and Experimental Investigation of Origin of Giant Saturation Magnetization in Fe_{16}N_2 . <i>IEEE Transactions on Magnetics</i> , 2012 , 48, 1710-1717	2	67
166	Nanomagnetic competition assay for low-abundance protein biomarker quantification in unprocessed human sera. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4388-92	16.4	66

165	Perpendicular magnetic anisotropy and high spin-polarization ratio in epitaxial Fe-N thin films. <i>Physical Review B</i> , 2011 , 84,	3.3	65
164	High-magnetic-moment multifunctional nanoparticles for nanomedicine applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2007 , 311, 131-134	2.8	64
163	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600040	6.4	64
162	Magnetoresistive performance and comparison of supermagnetic nanoparticles on giant magnetoresistive sensor-based detection system. <i>Scientific Reports</i> , 2014 , 4, 5716	4.9	63
161	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> , 2016 , 109, 092403	3.4	61
160	Monodispersed and highly ordered L10 FePt nanoparticles prepared in the gas phase. <i>Applied Physics Letters</i> , 2006 , 88, 192505	3.4	60
159	Giant magnetoresistive-based biosensing probe station system for multiplex protein assays. <i>Biosensors and Bioelectronics</i> , 2015 , 70, 61-8	11.8	57
158	Biocompatible high-moment FeCo-Au magnetic nanoparticles for magnetic hyperthermia treatment optimization. <i>Journal of Magnetism and Magnetic Materials</i> , 2009 , 321, 1525-1528	2.8	56
157	Unidirectional spin-Hall and Rashba-Edelstein magnetoresistance in topological insulator-ferromagnet layer heterostructures. <i>Nature Communications</i> , 2018 , 9, 111	17.4	55
156	High Performance MgO-barrier Magnetic Tunnel Junctions for Flexible and Wearable Spintronic Applications. <i>Scientific Reports</i> , 2017 , 7, 42001	4.9	53
155	N site ordering effect on partially ordered Fe ₁₆ N ₂ . <i>Applied Physics Letters</i> , 2011 , 98, 092506	3.4	51
154	All-Optical Switching of Magnetic Tunnel Junctions with Single Subpicosecond Laser Pulses. <i>Physical Review Applied</i> , 2017 , 7,	4.3	49
153	Direct communication between magnetic tunnel junctions for nonvolatile logic fan-out architecture. <i>Applied Physics Letters</i> , 2010 , 97, 152504	3.4	48
152	A three-layer competition-based giant magnetoresistive assay for direct quantification of endoglin from human urine. <i>Analytical Chemistry</i> , 2011 , 83, 2996-3002	7.8	45
151	Nanocomposite exchange-spring magnet synthesized by gas phase method: From isotropic to anisotropic. <i>Applied Physics Letters</i> , 2011 , 98, 222507	3.4	44
150	Synthesis of Fe ₁₆ N ₂ compound Free-Standing Foils with 20 MGOe Magnetic Energy Product by Nitrogen Ion-Implantation. <i>Scientific Reports</i> , 2016 , 6, 25436	4.9	42
149	Development of a multiplexed giant magnetoresistive biosensor array prototype to quantify ovarian cancer biomarkers. <i>Biosensors and Bioelectronics</i> , 2019 , 126, 301-307	11.8	41
148	In-Memory Processing on the Spintronic CRAM: From Hardware Design to Application Mapping. <i>IEEE Transactions on Computers</i> , 2019 , 68, 1159-1173	2.5	40

147	Strain induced giant magnetism in epitaxial Fe ₁₆ N ₂ thin film. <i>Applied Physics Letters</i> , 2013 , 102, 072411	3.4	40
146	Real-time measurement of Brownian relaxation of magnetic nanoparticles by a mixing-frequency method. <i>Applied Physics Letters</i> , 2011 , 98, 213702	3.4	40
145	Magnetic detection of mercuric ion using giant magnetoresistance-based biosensing system. <i>Analytical Chemistry</i> , 2014 , 86, 3712-6	7.8	38
144	Magnetic-Nanosensor-Based Virus and Pathogen Detection Strategies before and during COVID-19. <i>ACS Applied Nano Materials</i> , 2020 , 3, 9560-9580	5.6	38
143	Magnetic Particle Spectroscopy: A Short Review of Applications Using Magnetic Nanoparticles. <i>ACS Applied Nano Materials</i> , 2020 , 3, 4972-4989	5.6	36
142	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> , 2019 , 10, 1077	5.7	34
141	Magnetic particle spectroscopy-based bioassays: methods, applications, advances, and future opportunities. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 173001	3	34
140	Surface Modification for Protein and DNA Immobilization onto GMR Biosensor. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 296-299	2	34
139	. <i>IEEE Transactions on Magnetics</i> , 2021 , 57, 1-39	2	34
138	Efficient In-Memory Processing Using Spintronics. <i>IEEE Computer Architecture Letters</i> , 2018 , 17, 42-46	1.8	33
137	Low Gilbert Damping Constant in Perpendicularly Magnetized W/CoFeB/MgO Films with High Thermal Stability. <i>Scientific Reports</i> , 2018 , 8, 13395	4.9	33
136	Magnetic Particle Spectroscopy for Detection of Influenza A Virus Subtype H1N1. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 13686-13697	9.5	32
135	Magnetic hyperthermia performance of magnetite nanoparticle assemblies under different driving fields. <i>AIP Advances</i> , 2017 , 7, 056327	1.5	28
134	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> , 2017 , 3, 74-82	2.4	28
133	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> , 2017 , 111, 012402	3.4	27
132	Precessional magnetization induced spin current from CoFeB into Ta. <i>Applied Physics Letters</i> , 2013 , 103, 252409	3.4	26
131	Experimental and theoretical investigation of cubic FeCo nanoparticles for magnetic hyperthermia. <i>Journal of Applied Physics</i> , 2009 , 105, 07B305	2.5	26
130	Advances in Magnetoresistive Biosensors. <i>Micromachines</i> , 2019 , 11,	3.3	26

129	Magnetic Nanoparticle Relaxation Dynamics-Based Magnetic Particle Spectroscopy for Rapid and Wash-Free Molecular Sensing. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 22979-22986	9.5	25
128	Evaluation of hyperthermia of magnetic nanoparticles by dehydrating DNA. <i>Scientific Reports</i> , 2014 , 4, 7216	4.9	25
127	Time-Resolved Magneto-Optical Kerr Effect of Magnetic Thin Films for Ultrafast Thermal Characterization. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2328-32	6.4	25
126	Preparation of an Fe_{16}N_2 Magnet via a Ball Milling and Shock Compaction Approach . <i>Advanced Engineering Materials</i> , 2016 , 18, 1009-1016	3.5	25
125	Computing with spins and magnets. <i>MRS Bulletin</i> , 2014 , 39, 696-702	3.2	25
124	Toward the direct deposition of L10 FePt nanoparticles. <i>Journal of Applied Physics</i> , 2005 , 97, 10J319	2.5	25
123	Characterizing Physical Properties of Superparamagnetic Nanoparticles in Liquid Phase Using Brownian Relaxation. <i>Small</i> , 2017 , 13, 1604135	11	23
122	Superparamagnetic nanoparticle-based viscosity test. <i>Applied Physics Letters</i> , 2015 , 107, 053701	3.4	22
121	Magnetic nanoparticles colourization by a mixing-frequency method. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 155001	3	22
120	Environment-friendly bulk Fe_{16}N_2 permanent magnet: Review and prospective. <i>Journal of Magnetism and Magnetic Materials</i> , 2020 , 497, 165962	2.8	22
119	Measurement of Brownian and Néel Relaxation of Magnetic Nanoparticles by a Mixing-Frequency Method. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 227-230	2	21
118	FeCo/Au core-shell nanocrystals. <i>Applied Physics Letters</i> , 2007 , 91, 233107	3.4	21
117	Magnetic dynamics of ferrofluids: mathematical models and experimental investigations. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 085005	3	20
116	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> , 2020 , 53, 205002	3	19
115	High-moment magnetic nanoparticles. <i>Journal of Nanoparticle Research</i> , 2020 , 22, 1	2.3	18
114	Observation of High Spin-to-Charge Conversion by Sputtered Bismuth Selenide Thin Films at Room Temperature. <i>Nano Letters</i> , 2019 , 19, 4836-4844	11.5	18
113	Magnetic properties of cubic FeCo nanoparticles with anisotropic long chain structure. <i>AIP Advances</i> , 2016 , 6, 056126	1.5	18
112	Using Spin-Hall MTJs to Build an Energy-Efficient In-memory Computation Platform 2019 ,		17

111	2017,		17
110	Biocompatible Fe-Si Nanoparticles with Adjustable Self-Regulation of Temperature for Medical Applications. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 12649-54	9.5	17
109	Cubic and Spherical High-Moment FeCo Nanoparticles With Narrow Size Distribution. <i>IEEE Transactions on Magnetics</i> , 2007 , 43, 3340-3342	2	17
108	Tunable charge to spin conversion in strontium iridate thin films. <i>Physical Review Materials</i> , 2019 , 3,	3.2	17
107	DFT calculation and experimental investigation of Mn doping effect in Fe ₁₆ N ₂ . <i>AIP Advances</i> , 2016 , 6, 056007	1.5	17
106	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> , 2019 , 52, 335002	3	16
105	Synthesis of Fe ₁₆ N ₂ Compound Anisotropic Magnet by the Strained-Wire Method. <i>Physical Review Applied</i> , 2016 , 6,	4.3	16
104	Epitaxial high saturation magnetization FeN thin films on Fe(001) seeded GaAs(001) single crystal wafer using facing target sputterings. <i>Journal of Applied Physics</i> , 2011 , 109, 07B767	2.5	16
103	A Detection System Based on Giant Magnetoresistive Sensors and High-Moment Magnetic Nanoparticles Demonstrates Zeptomole Sensitivity: Potential for Personalized Medicine. <i>Angewandte Chemie</i> , 2009 , 121, 2802-2805	3.6	16
102	Voltage control of ferrimagnetic order and voltage-assisted writing of ferrimagnetic spin textures. <i>Nature Nanotechnology</i> , 2021 , 16, 981-988	28.7	16
101	Localized detection of reversal nucleation generated by high moment magnetic nanoparticles using a large-area magnetic sensor. <i>Journal of Applied Physics</i> , 2017 , 122, 123901	2.5	15
100	Magnetic Weyl semimetals with diamond structure realized in spinel compounds. <i>Physical Review B</i> , 2020 , 101,	3.3	15
99	External-Field-Free Spin Hall Switching of Perpendicular Magnetic Nanopillar with a Dipole-Coupled Composite Structure. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901368	6.4	15
98	A Pathway to Enable Exponential Scaling for the Beyond-CMOS Era 2017 ,		14
97	Room-temperature spin-to-charge conversion in sputtered bismuth selenide thin films via spin pumping from yttrium iron garnet. <i>Applied Physics Letters</i> , 2019 , 114, 102401	3.4	14
96	Direct synthesis of large size ferromagnetic SmCo ₅ nanoparticles by a gas-phase condensation method. <i>Journal of Applied Physics</i> , 2013 , 113, 134310	2.5	14
95	The effect of strain induced by Ag underlayer on saturation magnetization of partially ordered Fe ₁₆ N ₂ thin films. <i>Applied Physics Letters</i> , 2013 , 103, 242412	3.4	14
94	(FeCo) ₃ Si ₃ O ₇ core-shell nanoparticles fabricated in the gas phase. <i>Nanotechnology</i> , 2007 , 18, 065701	3.4	14

93	Synthesis of Fe_{16}N_2 foils with an ultralow temperature coefficient of coercivity for rare-earth-free magnets. <i>Acta Materialia</i> , 2020 , 184, 143-150	8.4	14
92	Telegraphic switching signals by magnet tunnel junctions for neural spiking signals with high information capacity. <i>Journal of Applied Physics</i> , 2018 , 124, 152121	2.5	14
91	Synthesis of Fe_{16}N_2 ribbons with a porous structure. <i>Nanoscale Advances</i> , 2019 , 1, 1337-1342	5.1	13
90	Weak antilocalization and low-temperature characterization of sputtered polycrystalline bismuth selenide. <i>Applied Physics Letters</i> , 2018 , 112, 122402	3.4	12
89	Composition- and Phase-Controlled High-Magnetic-Moment $\text{Fe}_{1-x}\text{Co}_x$ Nanoparticles for Biomedical Applications. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 197-200	2	12
88	L10 FePd Synthetic Antiferromagnet through an fcc Ru Spacer Utilized for Perpendicular Magnetic Tunnel Junctions. <i>Physical Review Applied</i> , 2018 , 9,	4.3	11
87	Surface modification and bioconjugation of FeCo magnetic nanoparticles with proteins. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014 , 117, 449-56	6	11
86	Comparative analysis of several GMR strip sensor configurations for biological applications. <i>Sensors and Actuators A: Physical</i> , 2014 , 216, 349-354	3.9	11
85	Measurement of Brownian Relaxation of Magnetic Nanoparticle by a Multi-Tone Mixing-Frequency Method. <i>IEEE Transactions on Magnetics</i> , 2012 , 48, 3513-3516	2	11
84	Strain effect of multilayer FeN structure on GaAs substrate. <i>Journal of Applied Physics</i> , 2013 , 113, 17E149.5	4.5	11
83	Iron nanoparticles with tunable tetragonal structure and magnetic properties. <i>Physical Review Materials</i> , 2018 , 2,	3.2	11
82	Experimental Demonstration of Probabilistic Spin Logic by Magnetic Tunnel Junctions. <i>IEEE Magnetics Letters</i> , 2019 , 10, 1-5	1.6	11
81	Heavy-Metal-Free, Low-Damping, and Non-Interface Perpendicular Fe_{16}N_2 Thin Film and Magnetoresistance Device. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1900089	2.5	10
80	Spin pumping and large field-like torque at room temperature in sputtered amorphous WTe_2 films. <i>APL Materials</i> , 2020 , 8, 041102	5.7	10
79	Enhancement of tunneling magnetoresistance by inserting a diffusion barrier in L10- FePd perpendicular magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2018 , 112, 152401	3.4	10
78	A simulation study on superparamagnetic nanoparticle based multi-tracer tracking. <i>Applied Physics Letters</i> , 2015 , 107, 173701	3.4	10
77	High-frequency magnetoacoustic resonance through strain-spin coupling in perpendicular magnetic multilayers. <i>Science Advances</i> , 2020 , 6,	14.3	10
76	Large-area GMR bio-sensors based on reverse nucleation switching mechanism. <i>Journal of Magnetism and Magnetic Materials</i> , 2019 , 473, 484-489	2.8	10

75	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 & Interfaces</i> , 2021 , 13, 44136-44146	9.5	10
74	External-field-free magnetic biosensor. <i>Applied Physics Letters</i> , 2014 , 104, 122401	3.4	9
73	Thermal stability of partially ordered Fe ₁₆ N ₂ film on non-magnetic Ag under layer. <i>Journal of Applied Physics</i> , 2014 , 115, 17A767	2.5	9
72	High power and low critical current spin torque oscillation from a magnetic tunnel junction with a built-in hard axis polarizer. <i>Applied Physics Letters</i> , 2012 , 100, 032405	3.4	9
71	A core-shell nanomaterial with endogenous therapeutic and diagnostic functions. <i>Cancer Nanotechnology</i> , 2010 , 1, 13-18	7.9	9
70	Minnealloy: a new magnetic material with high saturation flux density and low magnetic anisotropy. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 37LT01	3	8
69	A method to evaluate the Fe ₁₆ N ₂ volume ratio in FeN bulk material by XPS. <i>Materials Research Express</i> , 2015 , 2, 116103	1.7	8
68	Irregularly Shaped Iron Nitride Nanoparticles as a Potential Candidate for Biomedical Applications: From Synthesis to Characterization. <i>ACS Omega</i> , 2020 , 5, 11756-11767	3.9	8
67	Large-scale interlayer rotations and Te grain boundaries in (Bi,Sb) ₂ Te ₃ thin films. <i>Physical Review Materials</i> , 2020 , 4,	3.2	8
66	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> , 2018 , 4, 76-84	2.4	8
65	Quantitative analysis and optimization of magnetization precession initiated by ultrafast optical pulses. <i>Applied Physics Letters</i> , 2018 , 113, 162405	3.4	8
64	Nitriding and martensitic phase transformation of the copper and boron doped iron nitride magnet. <i>Acta Materialia</i> , 2019 , 167, 80-88	8.4	7
63	High saturation magnetization and low magnetic anisotropy Fe-CN martensite thin film. <i>Applied Physics Letters</i> , 2019 , 114, 152401	3.4	7
62	Epitaxial Fe ₁₆ N ₂ thin film on nonmagnetic seed layer. <i>Applied Physics Letters</i> , 2018 , 112, 192402	3.4	7
61	Magnetic nanoparticles of core-shell structure for recoverable photocatalysts. <i>Applied Physics Letters</i> , 2013 , 102, 253102	3.4	7
60	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> , 2020 , 117,	3.4	7
59	Investigation of Commercial Iron Oxide Nanoparticles: Structural and Magnetic Property Characterization. <i>ACS Omega</i> , 2021 , 6, 6274-6283	3.9	7
58	Voltage-Controlled Antiferromagnetism in Magnetic Tunnel Junctions. <i>Physical Review Letters</i> , 2020 , 124, 187701	7.4	6

57	In Vitro Viscosity Measurement on Superparamagnetic Nanoparticle Suspensions. <i>IEEE Transactions on Magnetics</i> , 2016 , 52, 1-4	2	6
56	Scaling effect of spin-torque nano-oscillators. <i>AIP Advances</i> , 2017 , 7, 056624	1.5	6
55	Critical thickness of Fe_{16}N_2 layer prepared in low-temperature nitriding. <i>Journal of Applied Physics</i> , 2020 , 128, 223902	2.5	6
54	A Portable Magnetic Particle Spectrometer for Future Rapid and Wash-Free Bioassays. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 7966-7976	9.5	6
53	Magnetization Response Spectroscopy of Superparamagnetic Nanoparticles Under Mixing Frequency Fields. <i>IEEE Transactions on Magnetics</i> , 2016 , 52, 1-4	2	5
52	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> , 2019 , 66, 5353-5359	2.9	5
51	Giant Magnetoresistance Biosensors in Biomedical Applications.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	5
50	Ferromagnetic phase of the spinel compound MgV_2O_4 and its spintronics properties. <i>Physical Review B</i> , 2020 , 102,	3.3	4
49	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> , 2014 , 2014, 2769-72	0.9	4
48	Power enhancement of angular polarizer spin torque oscillator in magnetic tunnel junction. <i>Journal of Applied Physics</i> , 2011 , 109, 07C714	2.5	4
47	High-magnetic-moment nanoparticles for biomedicine. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 4483-6	0.9	4
46	MOUSE: Inference In Non-volatile Memory for Energy Harvesting Applications 2020 ,		4
45	Magnetic structure of Fe_{16}N_2 determined by polarized neutron diffraction on thin-film samples. <i>Physical Review B</i> , 2020 , 102,	3.3	4
44	Giant Anomalous Hall Effect due to Double-Degenerate Quasiflat Bands. <i>Physical Review Letters</i> , 2021 , 126, 106601	7.4	4
43	Estimating saturation magnetization of superparamagnetic nanoparticles in liquid phase. <i>Journal of Magnetism and Magnetic Materials</i> , 2019 , 471, 394-399	2.8	4
42	A DNA Read Alignment Accelerator Based on Computational RAM. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2020 , 6, 80-88	2.4	3
41	Spin current nano-oscillator (SCNO) as a potential frequency-based, ultra-sensitive magnetic biosensor: a simulation study. <i>Nanotechnology</i> , 2020 , 31, 375501	3.4	3
40	Tunable magnetic skyrmions in spintronic nanostructures for cellular-level magnetic neurostimulation. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 465002	3	3

39	A new and facile method for measurement of apparent density of monodisperse polymer beads. <i>Talanta</i> , 2010 , 80, 1681-5	6.2	3
38	High-Yield Gas-Phase Condensation Synthesis of Nanoparticles to Enable a Wide Array of Applications. <i>ACS Applied Nano Materials</i> , 2020 , 3, 7942-7949	5.6	3
37	Spintronic In-Memory Pattern Matching. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2019 , 5, 206-214	2.4	3
36	New insight on the Mössbauer spectra for Fe ₁₆ N ₂ thin films with high saturation magnetization. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 120907	1.4	3
35	Tunable magnetic domain walls for therapeutic neuromodulation at cellular level: Stimulating neurons through magnetic domain walls. <i>Journal of Applied Physics</i> , 2019 , 126, 183902	2.5	3
34	Annealing Temperature Effects on Spin Hall Magnetoresistance in Perpendicularly Magnetized W/CoFeB Bilayers. <i>IEEE Transactions on Magnetics</i> , 2019 , 55, 1-4	2	3
33	Magnetocrystalline anisotropy of Fe ₁₆ N ₂ under various DFT approaches. <i>AIP Advances</i> , 2021 , 11, 015039	1.5	3
32	Shape anisotropy effects on spin-torque oscillators. <i>AIP Advances</i> , 2020 , 10, 045101	1.5	2
31	Ferromagnetic resonance and magnetization switching characteristics of perpendicular magnetic tunnel junctions with synthetic antiferromagnetic free layers. <i>Applied Physics Letters</i> , 2022 , 120, 012404 ³⁻⁴	3.4	2
30	Bipolar Electric-Field Switching of Perpendicular Magnetic Tunnel Junctions through Voltage-Controlled Exchange Coupling.. <i>Nano Letters</i> , 2022 ,	11.5	2
29	Large unidirectional spin Hall and Rashba-Edelstein magnetoresistance in topological insulator/magnetic insulator heterostructures. <i>Applied Physics Reviews</i> , 2022 , 9, 011406	17.3	2
28	Magnetic field enhanced coercivity of Fe nanoparticles embedded in antiferromagnetic MnN films. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 035003	3	2
27	Analyzing the Effects of Interconnect Parasitics in the STT CRAM In-Memory Computational Platform. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2020 , 6, 71-79	2.4	2
26	Magnetic Particle Spectroscopy with One-Stage Lock-In Implementation for Magnetic Bioassays with Improved Sensitivities. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 17221-17231	3.8	2
25	Buffer layer engineering of L10 FePd thin films with large perpendicular magnetic anisotropy. <i>AIP Advances</i> , 2021 , 11, 025106	1.5	2
24	Large Superparamagnetic FeCo Nanocubes for Magnetic Theranostics. <i>ACS Applied Nano Materials</i> , 2021 , 4, 9382-9390	5.6	2
23	. <i>IEEE Magnetics Letters</i> , 2021 , 12, 1-5	1.6	2
22	Perpendicular magnetic tunnel junctions with multi-interface free layer. <i>Applied Physics Letters</i> , 2021 , 119, 242404	3.4	2

21	SpinOrbit Torque and Spin Hall Effect-Based Cellular Level Therapeutic Spintronic Neuromodulator: A Simulation Study. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 24963-24972	3.8	1
20	Theory of Quantum Computation With Magnetic Clusters. <i>IEEE Transactions on Quantum Engineering</i> , 2020 , 1, 1-8	2.9	1
19	Charge trapping analysis in sputtered Bi _x Se _{1-x} based accumulation-mode FETs. <i>AIP Advances</i> , 2020 , 10, 015315	1.5	1
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