

Jian-Ping Wang

List of Publications by Year in descending order

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189
papers

7,015
citations

53660

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71532

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193
docs citations

193
times ranked

7260
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on magnetic and spintronic neurostimulation: challenges and prospects. <i>Nanotechnology</i> , 2022, 33, 182004.	1.3	12
2	Ferromagnetic resonance and magnetization switching characteristics of perpendicular magnetic tunnel junctions with synthetic antiferromagnetic free layers. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	7
3	Strength-frequency curve for micromagnetic neurostimulation through excitatory postsynaptic potentials (EPSPs) on rat hippocampal neurons and numerical modeling of magnetic microcoil (1/4coil). <i>Journal of Neural Engineering</i> , 2022, 19, 016018.	1.8	7
4	Bipolar Electric-Field Switching of Perpendicular Magnetic Tunnel Junctions through Voltage-Controlled Exchange Coupling. <i>Nano Letters</i> , 2022, 22, 622-629.	4.5	15
5	Bipolar Random Spike and Bipolar Random Number Generation by Two Magnetic Tunnel Junctions. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 1582-1587.	1.6	5
6	Large unidirectional spin Hall and Rashba-Edelstein magnetoresistance in topological insulator/magnetic insulator heterostructures. <i>Applied Physics Reviews</i> , 2022, 9, .	5.5	13
7	Giant Magnetoresistance Biosensors in Biomedical Applications. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 9945-9969.	4.0	31
8	Energy-efficient and Reliable Inference in Nonvolatile Memory under Extreme Operating Conditions. <i>Transactions on Embedded Computing Systems</i> , 2022, 21, 1-36.	2.1	4
9	Magnetocrystalline anisotropy in V-doped and Cu-doped Fe16N2. <i>AIP Advances</i> , 2022, 12, .	0.6	2
10	Magnetic nanoparticles and magnetic particle spectroscopy-based bioassays: a 15 year recap. <i>Nano Futures</i> , 2022, 6, 022001.	1.0	16
11	Enhancement of voltage controlled magnetic anisotropy (VCMA) through electron depletion. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	6
12	Sub-ns Switching and Cryogenic-Temperature Performance of Mo-Based Perpendicular Magnetic Tunnel Junctions. <i>IEEE Electron Device Letters</i> , 2022, 43, 1215-1218.	2.2	3
13	Ultralow Current Switching of Synthetic-Antiferromagnetic Magnetic Tunnel Junctions Via Electric-Field Assisted by Spin-Orbit Torque. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	3
14	Charge trapping analysis in sputtered Bi _x Se _{1-x} based accumulation-mode FETs. II. Gate capacitance characteristics. <i>AIP Advances</i> , 2021, 11, 015221.	0.6	0
15	Magnetocrystalline anisotropy of Fe ₁₆ N ₂ under various DFT approaches. <i>AIP Advances</i> , 2021, 11, .	0.6	6
16	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> , 2021, 7, 88-96.	1.1	1
17	Influence of size and shape on key performance metrics in spin-torque oscillators. <i>AIP Advances</i> , 2021, 11, .	0.6	1
18	A Portable Magnetic Particle Spectrometer for Future Rapid and Wash-Free Bioassays. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 7966-7976.	4.0	17

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19	Investigation of Commercial Iron Oxide Nanoparticles: Structural and Magnetic Property Characterization. ACS Omega, 2021, 6, 6274-6283.	1.6	21
20	Buffer layer engineering of L1 FePd thin films with large perpendicular magnetic anisotropy. AIP Advances, 2021, 11, .	0.6	8
21	Giant Anomalous Hall Effect due to Double-Degenerate Quasiflat Bands. Physical Review Letters, 2021, 126, 106601.	2.9	16
22	Large fieldlike torque in amorphous Ru ₂ Sn ₃ originated from the intrinsic spin Hall effect. Physical Review Materials, 2021, 5, .	0.9	7
23	Stable and Monodisperse Iron Nitride Nanoparticle Suspension for Magnetic Diagnosis and Treatment: Development of Synthesis and Surface Functionalization Strategies. ACS Applied Nano Materials, 2021, 4, 4409-4418.	2.4	5
24	Influence of Total Ionizing Dose on Magnetic Tunnel Junctions With Perpendicular Anisotropy. IEEE Transactions on Nuclear Science, 2021, 68, 748-755.	1.2	7
25	CAMeleon. , 2021, , .		0
26	Magnetic Particle Spectroscopy with One-Stage Lock-In Implementation for Magnetic Bioassays with Improved Sensitivities. Journal of Physical Chemistry C, 2021, 125, 17221-17231.	1.5	8
27	Roadmap of Spin-Orbit Torques. IEEE Transactions on Magnetics, 2021, 57, 1-39.	1.2	225
28	Surface acoustic wave induced modulation of tunneling magnetoresistance in magnetic tunnel junctions. Journal of Applied Physics, 2021, 130, .	1.1	3
29	Voltage control of ferrimagnetic order and voltage-assisted writing of ferrimagnetic spin textures. Nature Nanotechnology, 2021, 16, 981-988.	15.6	45
30	Determining the coercivity of anisotropic Heisenberg magnets by Monte Carlo sampling: Application to the design of permanent magnets. Journal of Magnetism and Magnetic Materials, 2021, 531, 167928.	1.0	0
31	Large Superparamagnetic FeCo Nanocubes for Magnetic Theranostics. ACS Applied Nano Materials, 2021, 4, 9382-9390.	2.4	3
32	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. ACS Applied Materials & Interfaces, 2021, 13, 44136-44146.	4.0	35
33	Influence of Intrinsic Thermal Stability on Switching Rate and Tunability of Dual-Biased Magnetic Tunnel Junctions for Probabilistic Bits. IEEE Magnetics Letters, 2021, 12, 1-5.	0.6	2
34	Perpendicular magnetic tunnel junctions with multi-interface free layer. Applied Physics Letters, 2021, 119, .	1.5	12
35	Environment-friendly bulk Fe ₁₆ N ₂ permanent magnet: Review and prospective. Journal of Magnetism and Magnetic Materials, 2020, 497, 165962.	1.0	44
36	Magnetic field enhanced coercivity of Fe nanoparticles embedded in antiferromagnetic MnN films. Journal Physics D: Applied Physics, 2020, 53, 035003.	1.3	3

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37	Advances in Magnetoresistive Biosensors. <i>Micromachines</i> , 2020, 11, 34.	1.4	53
38	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.	3.8	21
39	Permanent magnet design assisted by antiferromagnet-ferromagnet interface coupling: A Monte Carlo study. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 500, 166360.	1.0	2
40	Magnetic-Nanosensor-Based Virus and Pathogen Detection Strategies before and during COVID-19. <i>ACS Applied Nano Materials</i> , 2020, 3, 9560-9580.	2.4	81
41	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.	1.1	8
42	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, .	1.5	13
43	Effects of mobile oxygen ions in top-gated synthetic antiferromagnet structure. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	2
44	Effect of Oblique Versus Normal Deposition on the Properties of Perpendicularly Magnetized FePd Thin Films. <i>IEEE Magnetics Letters</i> , 2020, 11, 1-5.	0.6	2
45	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.	2.4	8
46	High-frequency magnetoacoustic resonance through strain-spin coupling in perpendicular magnetic multilayers. <i>Science Advances</i> , 2020, 6, .	4.7	16
47	Magnetic structure of Fe_{16}N_2 determined by polarized neutron diffraction on thin-film samples. <i>Physical Review B</i> , 2020, 102, .	1.1	10
48	Ferromagnetic phase of the spinel compound MgV_2O_4 and its spintronics properties. <i>Physical Review B</i> , 2020, 102, .	1.1	6
49	Magnetic Particle Spectroscopy: A Short Review of Applications Using Magnetic Nanoparticles. <i>ACS Applied Nano Materials</i> , 2020, 3, 4972-4989.	2.4	78
50	Theory of Quantum Computation With Magnetic Clusters. <i>IEEE Transactions on Quantum Engineering</i> , 2020, 1, 1-8.	2.9	1
51	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.	1.1	13
52	Voltage-Controlled Antiferromagnetism in Magnetic Tunnel Junctions. <i>Physical Review Letters</i> , 2020, 124, 187701.	2.9	15
53	Spin pumping and large field-like torque at room temperature in sputtered amorphous WTe_2 films. <i>APL Materials</i> , 2020, 8, .	2.2	21
54	Shape anisotropy effects on spin-torque oscillators. <i>AIP Advances</i> , 2020, 10, 045101.	0.6	2

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55	Irregularly Shaped Iron Nitride Nanoparticles as a Potential Candidate for Biomedical Applications: From Synthesis to Characterization. ACS Omega, 2020, 5, 11756-11767.	1.6	14
56	Spin current nano-oscillator (SCNO) as a potential frequency-based, ultra-sensitive magnetic biosensor: a simulation study. Nanotechnology, 2020, 31, 375501.	1.3	9
57	Magnetic Particle Spectroscopy for Detection of Influenza A Virus Subtype H1N1. ACS Applied Materials & Interfaces, 2020, 12, 13686-13697.	4.0	55
58	Magnetic Weyl semimetals with diamond structure realized in spinel compounds. Physical Review B, 2020, 101, .	1.1	27
59	External-Field-Free Spin Hall Switching of Perpendicular Magnetic Nanopillar with a Dipole-Coupled Composite Structure. Advanced Electronic Materials, 2020, 6, 1901368.	2.6	29
60	High-moment magnetic nanoparticles. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	25
61	Charge trapping analysis in sputtered Bi _x Se _{1-x} based accumulation-mode FETs. AIP Advances, 2020, 10, 015315.	0.6	2
62	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. Journal Physics D: Applied Physics, 2020, 53, 205002.	1.3	24
63	Critical thickness of Fe_{16}N_2 layer prepared in low-temperature nitriding. Journal of Applied Physics, 2020, 128, .	1.1	9
64	Large-scale interlayer rotations and Te grain boundaries in Fe_{16}N_2 thin films. Physical Review Materials, 2020, 4, .	0.9	10
65	MOUSE: Inference In Non-volatile Memory for Energy Harvesting Applications. , 2020, , .		18
66	Carbon and Microstructure Effects on the Magnetic Properties of Fe-CN Soft Magnetic Materials (Minnealloy). Minerals, Metals and Materials Series, 2020, , 1841-1852.	0.3	1
67	In-Memory Processing on the Spintronic CRAM: From Hardware Design to Application Mapping. IEEE Transactions on Computers, 2019, 68, 1159-1173.	2.4	69
68	Tunable magnetic skyrmions in spintronic nanostructures for cellular-level magnetic neurostimulation. Journal Physics D: Applied Physics, 2019, 52, 465002.	1.3	8
69	Observation of High Spin-to-Charge Conversion by Sputtered Bismuth Selenide Thin Films at Room Temperature. Nano Letters, 2019, 19, 4836-4844.	4.5	33
70	Synthesis of Fe_{16}N_2 ribbons with a porous structure. Nanoscale Advances, 2019, 1, 1337-1342.	2.2	20
71	Magnetic nanoparticles in nanomedicine: a review of recent advances. Nanotechnology, 2019, 30, 502003.	1.3	340
72	Spin-Orbit Torque and Spin Hall Effect-Based Cellular Level Therapeutic Spintronic Neuromodulator: A Simulation Study. Journal of Physical Chemistry C, 2019, 123, 24963-24972.	1.5	7

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73	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.	1.5	53
74	Nitriding and martensitic phase transformation of the copper and boron doped iron nitride magnet. <i>Acta Materialia</i> , 2019, 167, 80-88.	3.8	11
75	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.	4.0	37
76	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.	1.3	32
77	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.	1.2	12
78	High saturation magnetization and low magnetic anisotropy Fe-CN martensite thin film. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	9
79	Using Spin-Hall MTJs to Build an Energy-Efficient In-memory Computation Platform. , 2019, , .		26
80	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, .	1.5	22
81	Magnetic particle spectroscopy-based bioassays: methods, applications, advances, and future opportunities. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 173001.	1.3	58
82	Spintronic In-Memory Pattern Matching. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2019, 5, 206-214.	1.1	6
83	Experimental Demonstration of Probabilistic Spin Logic by Magnetic Tunnel Junctions. <i>IEEE Magnetics Letters</i> , 2019, 10, 1-5.	0.6	19
84	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.	1.6	11
85	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.	0.8	5
86	Tunable magnetic domain walls for therapeutic neuromodulation at cellular level: Stimulating neurons through magnetic domain walls. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	7
87	Development of a multiplexed giant magnetoresistive biosensor array prototype to quantify ovarian cancer biomarkers. <i>Biosensors and Bioelectronics</i> , 2019, 126, 301-307.	5.3	61
88	Large-area GMR bio-sensors based on reverse nucleation switching mechanism. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 473, 484-489.	1.0	13
89	Estimating saturation magnetization of superparamagnetic nanoparticles in liquid phase. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 471, 394-399.	1.0	7
90	Annealing Temperature Effects on Spin Hall Magnetoresistance in Perpendicularly Magnetized W/CoFeB Bilayers. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-4.	1.2	5

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91	Tunable charge to spin conversion in strontium iridate thin films. <i>Physical Review Materials</i> , 2019, 3, .	0.9	37
92	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle L \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:} \rangle$ Synthetic Antiferromagnet through an fcc Ru Spacer Utilized for Perpendicular Magnetic Tunnel Junctions. <i>Physical Review Applied</i> , 2018, 9, .	1.5	23
93	Enhancement of tunneling magnetoresistance by inserting a diffusion barrier in L1-FePd perpendicular magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	15
94	Nanotechnology: Review of concepts and potential application of sensing platforms in food safety. <i>Food Microbiology</i> , 2018, 75, 47-54.	2.1	131
95	Unidirectional spin-Hall and Rashba-Edelstein magnetoresistance in topological insulator-ferromagnet layer heterostructures. <i>Nature Communications</i> , 2018, 9, 111.	5.8	87
96	Weak antilocalization and low-temperature characterization of sputtered polycrystalline bismuth selenide. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	16
97	Efficient In-Memory Processing Using Spintronics. <i>IEEE Computer Architecture Letters</i> , 2018, 17, 42-46.	1.0	49
98	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.	13.1	304
99	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.	1.1	18
100	Telegraphic switching signals by magnet tunnel junctions for neural spiking signals with high information capacity. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	24
101	Quantitative analysis and optimization of magnetization precession initiated by ultrafast optical pulses. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	12
102	Low Gilbert Damping Constant in Perpendicularly Magnetized W/CoFeB/MgO Films with High Thermal Stability. <i>Scientific Reports</i> , 2018, 8, 13395.	1.6	50
103	Room-temperature high spin-orbit torque due to quantum confinement in sputtered Bi _x Se(1-x) films. <i>Nature Materials</i> , 2018, 17, 800-807.	13.3	344
104	Epitaxial Fe ₁₆ N ₂ thin film on nonmagnetic seed layer. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	10
105	Iron nanoparticles with tunable tetragonal structure and magnetic properties. <i>Physical Review Materials</i> , 2018, 2, .	0.9	12
106	Magnetic Nanoparticle-Based Biosensing. , 2018, , 247-270.		2
107	High Performance MgO-barrier Magnetic Tunnel Junctions for Flexible and Wearable Spintronic Applications. <i>Scientific Reports</i> , 2017, 7, 42001.	1.6	70
108	Magnetic dynamics of ferrofluids: mathematical models and experimental investigations. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 085005.	1.3	24

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109	All-Optical Switching of Magnetic Tunnel Junctions with Single Subpicosecond Laser Pulses. <i>Physical Review Applied</i> , 2017, 7, .	1.5	76
110	A Pathway to Enable Exponential Scaling for the Beyond-CMOS Era. , 2017, , .		19
111	Characterization: Characterizing Physical Properties of Superparamagnetic Nanoparticles in Liquid Phase Using Brownian Relaxation (<i>Small</i> 22/2017). <i>Small</i> , 2017, 13, .	5.2	0
112	Characterizing Physical Properties of Superparamagnetic Nanoparticles in Liquid Phase Using Brownian Relaxation. <i>Small</i> , 2017, 13, 1604135.	5.2	26
113	Magnetic hyperthermia performance of magnetite nanoparticle assemblies under different driving fields. <i>AIP Advances</i> , 2017, 7, .	0.6	36
114	Portable GMR Handheld Platform for the Detection of Influenza A Virus. <i>ACS Sensors</i> , 2017, 2, 1594-1601.	4.0	96
115	Minnealloy: a new magnetic material with high saturation flux density and low magnetic anisotropy. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 37LT01.	1.3	16
116	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.	1.1	19
117	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, .	1.5	34
118	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.	1.1	33
119	Scaling effect of spin-torque nano-oscillators. <i>AIP Advances</i> , 2017, 7, 056624.	0.6	9
120	A single magnetic-tunnel-junction stochastic computing unit. , 2017, , .		21
121	Giant Magnetoresistance-based Biosensor for Detection of Influenza A Virus. <i>Frontiers in Microbiology</i> , 2016, 7, 400.	1.5	132
122	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. <i>Advanced Electronic Materials</i> , 2016, 2, 1600040.	2.6	85
123	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, .	1.5	75
124	DFT calculation and experimental investigation of Mn doping effect in Fe ₁₆ N ₂ . <i>AIP Advances</i> , 2016, 6, .	0.6	20
125	Magnetic properties of cubic FeCo nanoparticles with anisotropic long chain structure. <i>AIP Advances</i> , 2016, 6, .	0.6	23
126	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.	1.6	50

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127	Synthesis of $\text{Fe}_3\text{O}_4/\text{Fe}_2\text{O}_3$ Anisotropic Magnet by t. Physical Review Applied, 2016, 6, .	1.6	20
128	Time-Resolved Magneto-Optical Kerr Effect of Magnetic Thin Films for Ultrafast Thermal Characterization. Journal of Physical Chemistry Letters, 2016, 7, 2328-2332.	2.1	29
129	Preparation of an $\text{Fe}_3\text{O}_4/\text{Fe}_2\text{O}_3$ Magnet via a Ball Milling and Shock Compaction Approach. Advanced Engineering Materials, 2016, 18, 1009-1016.	1.6	29
130	<i>In Vitro</i> Viscosity Measurement on Superparamagnetic Nanoparticle Suspensions. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	6
131	Magnetization Response Spectroscopy of Superparamagnetic Nanoparticles Under Mixing Frequency Fields. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	7
132	A simulation study on superparamagnetic nanoparticle based multi-tracer tracking. Applied Physics Letters, 2015, 107, .	1.5	13
133	Biocompatible Fe^3Si Nanoparticles with Adjustable Self-Regulation of Temperature for Medical Applications. ACS Applied Materials & Interfaces, 2015, 7, 12649-12654.	4.0	18
134	Searching for high magnetization density in bulk Fe: the new metastable Fe_6 phase. Journal of Physics Condensed Matter, 2015, 27, 016001.	0.7	1
135	Giant magnetoresistive-based biosensing probe station system for multiplex protein assays. Biosensors and Bioelectronics, 2015, 70, 61-68.	5.3	68
136	Giant Spin Pumping and Inverse Spin Hall Effect in the Presence of Surface and Bulk Spin-Orbit Coupling of Topological Insulator Bi_2Se_3 . Nano Letters, 2015, 15, 7126-7132.	4.5	257
137	Spin Hall switching of the magnetization in Ta/TbFeCo structures with bulk perpendicular anisotropy. Applied Physics Letters, 2015, 106, .	1.5	88
138	Superparamagnetic nanoparticle-based viscosity test. Applied Physics Letters, 2015, 107, .	1.5	26
139	A method to evaluate $\text{Fe}_3\text{O}_4/\text{Fe}_2\text{O}_3$ volume ratio in FeN bulk material by XPS. Materials Research Express, 2015, 2, 116103.	0.8	11
140	Viscosity effect on the brownian relaxation based detection for immunoassay applications. , 2014, 2014, 2769-72.		4
141	Thermal stability of partially ordered Fe_{16}N_2 film on non-magnetic Ag under layer. Journal of Applied Physics, 2014, 115, .	1.1	10
142	External-field-free magnetic biosensor. Applied Physics Letters, 2014, 104, .	1.5	10
143	Surface modification and bioconjugation of FeCo magnetic nanoparticles with proteins. Colloids and Surfaces B: Biointerfaces, 2014, 117, 449-456.	2.5	14
144	Computing with spins and magnets. MRS Bulletin, 2014, 39, 696-702.	1.7	33

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145	Magnetic Detection of Mercuric Ion Using Giant Magnetoresistance-Based Biosensing System. <i>Analytical Chemistry</i> , 2014, 86, 3712-3716.	3.2	42
146	Magnetic nanoparticles colourization by a mixing-frequency method. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 155001.	1.3	31
147	Comparative analysis of several GMR strip sensor configurations for biological applications. <i>Sensors and Actuators A: Physical</i> , 2014, 216, 349-354.	2.0	14
148	Magnetoresistive performance and comparison of supermagnetic nanoparticles on giant magnetoresistive sensor-based detection system. <i>Scientific Reports</i> , 2014, 4, 5716.	1.6	80
149	Evaluation of Hyperthermia of Magnetic Nanoparticles by Dehydrating DNA. <i>Scientific Reports</i> , 2014, 4, 7216.	1.6	33
150	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.	1.2	14
151	Surface Modification for Protein and DNA Immobilization onto GMR Biosensor. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 296-299.	1.2	40
152	Measurement of Brownian and Néel Relaxation of Magnetic Nanoparticles by a Mixing-Frequency Method. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 227-230.	1.2	23
153	Direct synthesis of large size ferromagnetic SmCo_5 nanoparticles by a gas-phase condensation method. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	19
154	Magnetic nanoparticles of core-shell structure for recoverable photocatalysts. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	7
155	Strain induced giant magnetism in epitaxial Fe_{16}N_2 thin film. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	48
156	Precessional magnetization induced spin current from CoFeB into Ta . <i>Applied Physics Letters</i> , 2013, 103, .	1.5	27
157	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, .	1.5	16
158	Strain effect of multilayer FeN structure on GaAs substrate. <i>Journal of Applied Physics</i> , 2013, 113, 17E149.	1.1	12
159	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, .	1.5	10
160	Measurement of Brownian Relaxation of Magnetic Nanoparticle by a Multi-Tone Mixing-Frequency Method. <i>IEEE Transactions on Magnetics</i> , 2012, 48, 3513-3516.	1.2	12
161	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.	1.2	75
162	High-Power Coherent Microwave Emission from Magnetic Tunnel Junction Nano-oscillators with Perpendicular Anisotropy. <i>ACS Nano</i> , 2012, 6, 6115-6121.	7.3	125

#	ARTICLE	IF	CITATIONS
163	A Three-Layer Competition-Based Giant Magnetoresistive Assay for Direct Quantification of Endoglin from Human Urine. <i>Analytical Chemistry</i> , 2011, 83, 2996-3002.	3.2	46
164	Real-time measurement of Brownian relaxation of magnetic nanoparticles by a mixing-frequency method. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	41
165	Power enhancement of angular polarizer spin torque oscillator in magnetic tunnel junction. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	6
166	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.	1.1	19
167	Perpendicular magnetic anisotropy and high spin-polarization ratio in epitaxial Fe-N thin films. <i>Physical Review B</i> , 2011, 84, .	1.1	72
168	Nanocomposite exchange-spring magnet synthesized by gas phase method: From isotropic to anisotropic. <i>Applied Physics Letters</i> , 2011, 98, 222507.	1.5	45
169	N site ordering effect on partially ordered Fe ₁₆ N ₂ . <i>Applied Physics Letters</i> , 2011, 98, .	1.5	61
170	A core-shell nanomaterial with endogenous therapeutic and diagnostic functions. <i>Cancer Nanotechnology</i> , 2010, 1, 13-18.	1.9	10
171	Direct communication between magnetic tunnel junctions for nonvolatile logic fan-out architecture. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	54
172	Nanomagnetic Competition Assay for Low-Abundance Protein Biomarker Quantification in Unprocessed Human Sera. <i>Journal of the American Chemical Society</i> , 2010, 132, 4388-4392.	6.6	73
173	A new and facile method for measurement of apparent density of monodisperse polymer beads. <i>Talanta</i> , 2010, 80, 1681-1685.	2.9	3
174	High-magnetic-moment nanoparticles for biomedicine. , 2009, 2009, 4483-6.		4
175	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, 2764-2767.	7.2	122
176	Biocompatible high-moment FeCo-Au magnetic nanoparticles for magnetic hyperthermia treatment optimization. <i>Journal of Magnetism and Magnetic Materials</i> , 2009, 321, 1525-1528.	1.0	58
177	Biomarkers identification and detection based on GMR sensor and sub 13 nm magnetic nanoparticles. , 2009, 2009, 5432-5.		1
178	Experimental and theoretical investigation of cubic FeCo nanoparticles for magnetic hyperthermia. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	29
179	FePt Magnetic Nanoparticles and Their Assembly for Future Magnetic Media. <i>Proceedings of the IEEE</i> , 2008, 96, 1847-1863.	16.4	92
180	(FeCo) ₃ Si@SiO _x core-shell nanoparticles fabricated in the gas phase. <i>Nanotechnology</i> , 2007, 18, 065701.	1.3	15

#	ARTICLE	IF	CITATIONS
181	FeCo@Au core-shell nanocrystals. Applied Physics Letters, 2007, 91, 233107.	1.5	24
182	High-magnetic-moment multifunctional nanoparticles for nanomedicine applications. Journal of Magnetism and Magnetic Materials, 2007, 311, 131-134.	1.0	75
183	Cubic and Spherical High-Moment FeCo Nanoparticles With Narrow Size Distribution. IEEE Transactions on Magnetics, 2007, 43, 3340-3342.	1.2	19
184	Spin transfer in nanomagnetic devices with perpendicular anisotropy. Applied Physics Letters, 2006, 88, 172506.	1.5	253
185	Monodispersed and highly ordered L10 FePt nanoparticles prepared in the gas phase. Applied Physics Letters, 2006, 88, 192505.	1.5	62
186	Programmable spintronics logic device based on a magnetic tunnel junction element. Journal of Applied Physics, 2005, 97, 10D509.	1.1	85
187	Magnetomicelles: A Composite Nanostructures from Magnetic Nanoparticles and Cross-Linked Amphiphilic Block Copolymers. Nano Letters, 2005, 5, 1987-1991.	4.5	269
188	Toward the direct deposition of L10 FePt nanoparticles. Journal of Applied Physics, 2005, 97, 10J319.	1.1	26
189	High-magnetic-moment core-shell-type FeCo@Au@Ag nanoparticles. Applied Physics Letters, 2005, 87, 152502.	1.5	124