

Hyunsoo Yang

List of Publications by Year in descending order

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times ranked

10621
citing authors

#	ARTICLE	IF	CITATIONS
1	Mimicking synaptic plasticity with a wedged Pt/Co/Pt spin-orbit torque device. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 095001.	2.8	3
2	Graphene moiré superlattices with giant quantum nonlinearity of chiral Bloch electrons. <i>Nature Nanotechnology</i> , 2022, 17, 378-383.	31.5	35
3	Terahertz Spin-Current Pulses from an Off-Resonant Antiferromagnet. <i>Physical Review Applied</i> , 2022, 17, .	3.8	3
4	Enhanced subterahertz spin-current transients via modulation of cross-sublattice damping in uniaxial antiferromagnets. <i>Physical Review B</i> , 2022, 105, .	3.2	3
5	Ferrimagnetic spintronics. <i>Nature Materials</i> , 2022, 21, 24-34.	27.5	129
6	Two-dimensional materials prospects for non-volatile spintronic memories. <i>Nature</i> , 2022, 606, 663-673.	27.8	116
7	Emerging Spintronics Phenomena and Applications. <i>IEEE Transactions on Magnetics</i> , 2021, 57, 1-34.	2.1	20
8	Room-temperature nonlinear Hall effect and wireless radiofrequency rectification in Weyl semimetal TaIrTe ₄ . <i>Nature Nanotechnology</i> , 2021, 16, 421-425.	31.5	91
9	Shared-Write-Channel-Based Device for High-Density Spin-Orbit-Torque Magnetic Random-Access Memory. <i>Physical Review Applied</i> , 2021, 15, .	3.8	8
10	Highly efficient charge-to-spin conversion from <i>in situ</i> Bi ₂ Se ₃ /Fe heterostructures. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	14
11	Observation of the antiferromagnetic spin Hall effect. <i>Nature Materials</i> , 2021, 20, 800-804.	27.5	113
12	Magnon- versus Electron-Mediated Spin-Transfer Torque Exerted by Spin Current across an Antiferromagnetic Insulator to Switch the Magnetization of an Adjacent Ferromagnetic Metal. <i>Physical Review Applied</i> , 2021, 15, .	3.8	11
13	Interplay between superconductivity and the Kondo effect on magnetic nanodots. <i>Applied Physics Letters</i> , 2021, 118, 152407.	3.3	3
14	Composition dependence of spin-orbit torques in PtRh/ferromagnet heterostructures. <i>APL Materials</i> , 2021, 9, .	5.1	8
15	Electrically connected spin-torque oscillators array for 2.4-GHz WiFi band transmission and energy harvesting. <i>Nature Communications</i> , 2021, 12, 2924.	12.8	40
16	Observation of the Out-of-Plane Polarized Spin Current from CVD Grown WTe ₂ . <i>Advanced Quantum Technologies</i> , 2021, 4, 2100038.	3.9	23
17	Roadmap of Spin-Orbit Torques. <i>IEEE Transactions on Magnetics</i> , 2021, 57, 1-39.	2.1	225
18	Origin and enhancement of the spin Hall angle in the Weyl semimetals LaAlSi and LaAlGe. <i>Physical Review B</i> , 2021, 104, .	3.2	14

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19	Evaluation of Effective Thermal Stability Factor for Patterned Magnetic Tunnel Junction Array. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	0
20	The 2021 Magnonics Roadmap. Journal of Physics Condensed Matter, 2021, 33, 413001.	1.8	287
21	Combination of red and blue light induces anthocyanin and other secondary metabolite biosynthesis pathways in an age-dependent manner in Batavia lettuce. Plant Science, 2021, 310, 110977.	3.6	25
22	Quantum frequency doubling in the topological insulator Bi ₂ Se ₃ . Nature Communications, 2021, 12, 698.	12.8	48
23	Superluminal-like magnon propagation in antiferromagnetic NiO at nanoscale distances. Nature Nanotechnology, 2021, 16, 1337-1341.	31.5	24
24	Driving Neurogenesis in Neural Stem Cells with High Sensitivity Optogenetics. NeuroMolecular Medicine, 2020, 22, 139-149.	3.4	7
25	Large enhancement of domain wall-induced anomalous magnetoresistance in ferrimagnetic Tb/Co wires: The effect of injecting spin Hall current. Current Applied Physics, 2020, 20, 262-265.	2.4	1
26	Slippery and Wear-Resistant Surfaces Enabled by Interface Engineered Graphene. Nano Letters, 2020, 20, 905-917.	9.1	18
27	Ferrimagnetic resonance induced by the spin Hall effect. Physical Review B, 2020, 102, .	3.2	5
28	Spin-Orbit Torque Magnetization Switching in MoTe ₂ /Permalloy Heterostructures. Advanced Materials, 2020, 32, e2002799.	21.0	40
29	Bloch Chirality Induced by an Interlayer Dzyaloshinskii-Moriya Interaction in Ferromagnetic Multilayers. Physical Review Letters, 2020, 125, 227203.	7.8	30
30	Ultrafast optical modulation of Dirac electrons in gated single-layer graphene. Physical Review B, 2020, 101, .	3.2	7
31	Electrical Generation and Detection of Terahertz Signal Based on Spin-Wave Emission From Ferrimagnets. Physical Review Applied, 2020, 13, .	3.8	8
32	Anisotropic Picosecond Spin-Photocurrent from Weyl Semimetal WTe ₂ . ACS Nano, 2020, 14, 3539-3545.	14.6	36
33	Dzyaloshinskii-Moriya interaction induced asymmetry in dispersion of magnonic Bloch modes. Physical Review B, 2020, 102, .	3.2	7
34	Ultrafast and energy-efficient spin-orbit torque switching in compensated ferrimagnets. Nature Electronics, 2020, 3, 37-42.	26.0	147
35	Microscopic origin of spin-orbit torque in ferromagnetic heterostructures: A first-principles approach. Physical Review B, 2020, 101, .	3.2	19
36	Magnetotransport of Weyl semimetals with tilted Dirac cones. New Journal of Physics, 2020, 22, 083081.	2.9	20

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37	Spin Nernst and anomalous Nernst effects and their signature outputs in ferromagnet/nonmagnet heterostructures. <i>Physical Review B</i> , 2020, 102, .	3.2	12
38	Unconventional domain-wall pairs and interacting Bloch lines in a Dzyaloshinskii-Moriya multilayer thin film. <i>Physical Review B</i> , 2020, 102, .	3.2	5
39	Impact of Fe ₈₀ B ₂₀ insertion on the properties of dual-MgO perpendicular magnetic tunnel junctions. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 455004.	2.8	1
40	Current-Enhanced Broadband THz Emission from Spintronic Devices. <i>Advanced Optical Materials</i> , 2019, 7, 1801608.	7.3	39
41	All-electric magnetization switching and Dzyaloshinskii-Moriya interaction in WTe ₂ /ferromagnet heterostructures. <i>Nature Nanotechnology</i> , 2019, 14, 945-949.	31.5	177
42	Quantitative Analysis of Topological, Chiral Spin Textures Stabilized by the Dzyaloshinskii-Moriya Interaction in Co/Pd Multilayers. <i>Microscopy and Microanalysis</i> , 2019, 25, 22-23.	0.4	0
43	Sub-Picosecond Carrier Dynamics Induced by Efficient Charge Transfer in MoTe ₂ /WTe ₂ van der Waals Heterostructures. <i>ACS Nano</i> , 2019, 13, 9587-9594.	14.6	22
44	Nonlinear Planar Hall Effect. <i>Physical Review Letters</i> , 2019, 123, 016801.	7.8	67
45	Field-Free Switching of Perpendicular Magnetization Through Spin Hall and Anomalous Hall Effects in Ferromagnet-Heavy-Metal-Ferromagnet Structures. <i>Physical Review Applied</i> , 2019, 12, .	3.8	12
46	Far out-of-equilibrium spin populations trigger giant spin injection into atomically thin MoS ₂ . <i>Nature Physics</i> , 2019, 15, 347-351.	16.7	105
47	Engineering Interfacial Perpendicular Magnetic Anisotropy in Fe ₂ CoSi/Pt Multilayers with Interfacial Strain and Orbital Hybridization. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1251-1260.	4.3	7
48	Quantification of Mixed Bloch-Néel Topological Spin Textures Stabilized by the Dzyaloshinskii-Moriya Interaction in Co/Pd Multilayers. <i>Physical Review Letters</i> , 2019, 122, 237201.	7.8	40
49	Oxygen-Migration-Based Spintronic Device Emulating a Biological Synapse. <i>Physical Review Applied</i> , 2019, 11, .	3.8	32
50	Magnetic immunity of spin-transfer-torque MRAM. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	7
51	Nonlinear magnetotransport shaped by Fermi surface topology and convexity. <i>Nature Communications</i> , 2019, 10, 1290.	12.8	38
52	Spin orbit torque driven magnetization switching with sputtered Bi ₂ Se ₃ spin current source. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 224001.	2.8	24
53	Anomalous Photothermoelectric Transport Due to Anisotropic Energy Dispersion in WTe ₂ . <i>Nano Letters</i> , 2019, 19, 2647-2652.	9.1	21
54	Magnetization switching by magnon-mediated spin torque through an antiferromagnetic insulator. <i>Science</i> , 2019, 366, 1125-1128.	12.6	127

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55	Current-induced Out-of-plane Spin Accumulation on the (001) Surface of the Mn_3Sn Antiferromagnet. <i>Physical Review Applied</i> , 2019, 12, .	3.8	30
56	Electric-field control of spin accumulation direction for spin-orbit torques. <i>Nature Communications</i> , 2019, 10, 248.	12.8	61
57	Boosting contact sliding and wear protection via atomic intermixing and tailoring of nanoscale interfaces. <i>Science Advances</i> , 2019, 5, eaau7886.	10.3	22
58	Long spin coherence length and bulk-like spin-orbit torque in ferrimagnetic multilayers. <i>Nature Materials</i> , 2019, 18, 29-34.	27.5	86
59	THz Spintronics: From THz Generation to Novel Material Characterization. , 2019, , .		0
60	Characterization and Manipulation of Spin Orbit Torque in Magnetic Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1705699.	21.0	85
61	Nitrogen plasma treatment in two-step temperature deposited FePt bilayer media. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 461, 6-13.	2.3	2
62	Exchange coupled CoPt/FePtC media for heat assisted magnetic recording. <i>Applied Physics Letters</i> , 2018, 112, 142411.	3.3	5
63	Nonvolatile infrared memory in MoS_2/PbS van der Waals heterostructures. <i>Science Advances</i> , 2018, 4, eaap7916.	10.3	161
64	Effect of capping layer on spin-orbit torques. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	8
65	Room-temperature Nanoseconds Spin Relaxation in WTe_2 and MoTe_2 Thin Films. <i>Advanced Science</i> , 2018, 5, 1700912.	11.2	34
66	Oscillatory spin-orbit torque switching induced by field-like torques. <i>Communications Physics</i> , 2018, 1, .	5.3	28
67	Bilinear magnetoelectric resistance as a probe of three-dimensional spin texture in topological surface states. <i>Nature Physics</i> , 2018, 14, 495-499.	16.7	108
68	Doping effects on structural and magnetic properties of Heusler alloys $\text{Fe}_2\text{Cr}_{1-x}\text{Co}_x\text{Si}$. <i>AIP Advances</i> , 2018, 8, 056328.	1.3	7
69	Efficient charge-spin conversion and magnetization switching through the Rashba effect at topological-insulator/Ag interfaces. <i>Physical Review B</i> , 2018, 97, .	3.2	53
70	Optical Quenching of Magnetic Vortex Visualized In Situ by Lorentz Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2018, 24, 912-913.	0.4	0
71	Ferromagnet structural tuning of interfacial symmetry breaking and spin Hall angle in ferromagnet/heavy metal bilayers. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	7
72	Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures. <i>Nature Materials</i> , 2018, 17, 1087-1094.	27.5	265

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73	Ultrafast Spin-to-Charge Conversion at the Surface of Topological Insulator Thin Films. <i>Advanced Materials</i> , 2018, 30, e1802356.	21.0	90
74	Spin accumulation in topological insulator thin films— influence of bulk and topological surface states. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 425301.	2.8	5
75	Recent advances in spin-orbit torques: Moving towards device applications. <i>Applied Physics Reviews</i> , 2018, 5, 031107.	11.3	176
76	Effect of $\text{Co}_x\text{Fe}_{1-x}\text{B}_{20}$ Composition o. <i>Physical Review Applied</i> , 2018, 10, .	3.8	11
77	FMR-related phenomena in spintronic devices. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 273002.	2.8	70
78	Anomalous Hall Effect of $\text{Fe}_2\text{CoSi/Pt}$ Multilayers With Large Perpendicular Magnetic Anisotropy. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	2
79	Terahertz Emission from Compensated Magnetic Heterostructures. <i>Advanced Optical Materials</i> , 2018, 6, 1800430.	7.3	59
80	Field-Free Spin-Orbit Torque Switching from Geometrical Domain-Wall Pinning. <i>Nano Letters</i> , 2018, 18, 4669-4674.	9.1	48
81	Observation of Out-of-Plane Spin Texture in a SrTiO_3 Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 412 Td (stretchy="false") <i>Review Letters</i> , 2018, 120, 266802.	7.8	53
82	Spin-wave calculations for magnetic stacks with interface Dzyaloshinskii-Moriya interaction. <i>Physical Review B</i> , 2018, 98, .	3.2	7
83	Optical manipulation of magnetic vortices visualized in situ by Lorentz electron microscopy. <i>Science Advances</i> , 2018, 4, eaat3077.	10.3	39
84	Direct visualization of current-induced spin accumulation in topological insulators. <i>Nature Communications</i> , 2018, 9, 2492.	12.8	30
85	Interface Engineering and Emergent Phenomena in Oxide Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1802439.	21.0	118
86	Impact ionization by hot carriers in a black phosphorus field effect transistor. <i>Nature Communications</i> , 2018, 9, 3414.	12.8	41
87	Tuning of current-induced effective magnetic field through Rashba effect engineering in hybrid multiferroic structures. <i>NPG Asia Materials</i> , 2018, 10, 740-748.	7.9	10
88	Tunable terahertz reflection of graphene via ionic liquid gating. <i>Nanotechnology</i> , 2017, 28, 095201.	2.6	5
89	Observation of stable Néel skyrmions in cobalt/palladium multilayers with Lorentz transmission electron microscopy. <i>Nature Communications</i> , 2017, 8, 14761.	12.8	222
90	Anomalous spin-orbit torque switching due to field-like torque—assisted domain wall reflection. <i>Science Advances</i> , 2017, 3, e1603099.	10.3	68

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91	Eigenmodes of Néel skyrmions in ultrathin magnetic films. AIP Advances, 2017, 7, 055212.	1.3	20
92	Topological-insulator-based terahertz modulator. Scientific Reports, 2017, 7, 13486.	3.3	20
93	Extrinsic Spin Hall Effect in $\text{Cu}/\text{Mn}/\text{Cu}$ Multilayers. Physical Review Applied, 2017, 8, .	3.3	10
94	Effect of surface state hybridization on current-induced spin-orbit torque in thin topological insulator films. Scientific Reports, 2017, 7, 792.	3.3	10
95	Static Magnetic Field Stimulation Enhances Oligodendrocyte Differentiation and Secretion of Neurotrophic Factors. Scientific Reports, 2017, 7, 6743.	3.3	57
96	Interfacial Rashba magnetoresistance of the two-dimensional electron gas at the $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Physical Review B, 2017, 96, .	3.2	13
97	Non-destructive patterning of 10-nm magnetic island array by phase transformation with low-energy proton irradiation. Applied Physics Letters, 2017, 111, .	3.3	4
98	Room temperature magnetization switching in topological insulator-ferromagnet heterostructures by spin-orbit torques. Nature Communications, 2017, 8, 1364.	12.8	271
99	Room-Temperature Giant Charge-to-Spin Conversion at the $\text{SrTiO}_3/\text{LaAlO}_3$ Oxide Interface. Nano Letters, 2017, 17, 7659-7664.	9.1	91
100	Anomalous Current-Induced Spin Torques in Ferrimagnets near Compensation. Physical Review Letters, 2017, 118, 167201.	7.8	192
101	High-Performance THz Emitters Based on Ferromagnetic/Nonmagnetic Heterostructures. Advanced Materials, 2017, 29, 1603031.	21.0	183
102	Active Multifunctional Microelectromechanical System Metadevices: Applications in Polarization Control, Wavefront Deflection, and Holograms. Advanced Optical Materials, 2017, 5, 1600716.	7.3	116
103	Strain Engineered Magnetic Tunnel Junctions and Spin-Orbit Torque Switching. , 2016, , .		0
104	Flexible MgO Barrier Magnetic Tunnel Junctions. Advanced Materials, 2016, 28, 4983-4990.	21.0	59
105	Localized surface plasmon resonance in graphene nanomesh with Au nanostructures. Applied Physics Letters, 2016, 109, 041106.	3.3	10
106	Hf thickness dependence of spin-orbit torques in Hf/CoFeB/MgO heterostructures. Applied Physics Letters, 2016, 108, .	3.3	79
107	Large spin-orbit torques in Pt/Co-Ni/W heterostructures. Applied Physics Letters, 2016, 109, .	3.3	71
108	Continuous Tuning of the Magnitude and Direction of Spin-Orbit Torque Using Bilayer Heavy Metals. Advanced Electronic Materials, 2016, 2, 1600210.	5.1	35

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109	Spin orbit torques and Dzyaloshinskii-Moriya interaction in dual-interfaced Co-Ni multilayers. Scientific Reports, 2016, 6, 32629.	3.3	75
110	Improvement of chemical ordering and magnetization dynamics of Co ²⁺ Fe ²⁺ Al ²⁺ Si Heusler alloy thin films by changing adjacent layers. RSC Advances, 2016, 6, 77811-77817.	3.6	8
111	Cloaking the magnons. Physical Review B, 2016, 93, .	3.2	3
112	Enhancement of spin Hall effect induced torques for current-driven magnetic domain wall motion: Inner interface effect. Physical Review B, 2016, 93, .	3.2	35
113	Optically induced spin-dependent diffusive transport in the presence of spin-orbit interaction for all-optical magnetization reversal. Physical Review B, 2016, 94, .	3.2	4
114	Helicity-Dependent Photovoltaic Effect in Bi ₂ Se ₃ Under Normal Incident Light. Advanced Optical Materials, 2016, 4, 1642-1650.	7.3	21
115	Enhanced Spin-Orbit Torque via Modulation of Spin Current Absorption. Physical Review Letters, 2016, 117, 217206.	7.8	104
116	Giant nonreciprocal emission of spin waves in Ta/Py bilayers. Science Advances, 2016, 2, e1501892.	10.3	41
117	Spin-transfer versus spin-orbit torque MRAM. , 2016, , .		3
118	The role of Pt underlayer on the magnetization dynamics of perpendicular magnetic anisotropy Pt/Co ₂ FeAl _{0.5} Si _{0.5} /MgO. Applied Physics Letters, 2016, 108, .	3.3	4
119	Flexible terahertz modulator based on coplanar-gate graphene field-effect transistor structure. Optics Letters, 2016, 41, 816.	3.3	33
120	Time-resolved imaging of pulse-induced magnetization reversal with a microwave assist field. Scientific Reports, 2015, 5, 10695.	3.3	3
121	Influence of tantalum underlayer on magnetization dynamics in Ni ₈₁ Fe ₁₉ films. Applied Physics Letters, 2015, 107, .	3.3	6
122	Investigating and engineering spin-orbit torques in heavy metal/Co ₂ FeAl _{0.5} Si _{0.5} /MgO thin film structures. Applied Physics Letters, 2015, 107, .	3.3	21
123	Two-step temperature deposited FePt bilayer for tunable magnetic properties. Journal Physics D: Applied Physics, 2015, 48, 445007.	2.8	3
124	Magnetic proximity effect in the topological insulator Bi ₂ SbTeSe ₂ . Physica Status Solidi - Rapid Research Letters, 2015, 9, 175-179.	2.4	4
125	Magnetization reversal using excitation of collective modes in nanodot matrices. Scientific Reports, 2015, 5, 7908.	3.3	3
126	Asymmetric spin-wave dispersion due to Dzyaloshinskii-Moriya interaction in an ultrathin Pt/CoFeB film. Applied Physics Letters, 2015, 106, .	3.3	102

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127	High density heat-assisted magnetic recording (HAMR) with use of nano-aperture optics. , 2015, , .		0
128	Graphene Terahertz Modulators by Ionic Liquid Gating. Advanced Materials, 2015, 27, 1874-1879.	21.0	98
129	Direct Observation of the Dzyaloshinskii-Moriya Interaction in a Pt/Co/Ni Film. Physical Review Letters, 2015, 114, 047201.	7.8	284
130	Individual magnetization reversal of a square dot matrix by common current excitation. Journal Physics D: Applied Physics, 2015, 48, 295301.	2.8	1
131	Topological Surface States Originated Spin-Orbit Torques in Bi_2Se_3 . Physical Review Letters, 2015, 114, 257202.	7.8	269
132	Coherent Subnanosecond Switching of Perpendicular Magnetization by the Fieldlike Spin-Orbit Torque without an External Magnetic Field. Physical Review Applied, 2015, 3, .	3.8	77
133	Synchronization of spin-transfer torque oscillators by spin pumping, inverse spin Hall, and spin Hall effects. Journal of Applied Physics, 2015, 117, 063907.	2.5	16
134	Spin-orbit-torque engineering via oxygen manipulation. Nature Nanotechnology, 2015, 10, 333-338.	31.5	271
135	Extremely large magnetoresistance in few-layer graphene/boron nitride heterostructures. Nature Communications, 2015, 6, 8337.	12.8	86
136	Characterization of C-apertures in a successful demonstration of heat-assisted magnetic recording. Optics Letters, 2015, 40, 3444.	3.3	6
137	Heat-assisted magnetic recording (HAMR) demonstration using C-shaped nano-apertures. Proceedings of SPIE, 2015, , .	0.8	1
138	In-plane angular dependence of the spin-wave nonreciprocity of an ultrathin film with Dzyaloshinskii-Moriya interaction. Applied Physics Letters, 2015, 107, 022402.	3.3	28
139	Low energy C+ ion embedment induced structural disorder in FePt . Journal of Applied Physics, 2014, 115, .	2.5	1
140	Defect-induced negative magnetoresistance and surface state robustness in the topological insulator Bi_2SbTe . Physical Review B, 2014, 90, .	3.3	36
141	Tunable daughter molds from a single Si master grating mold. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, 051601.	1.2	1
142	Thermally assisted domain wall nucleation in perpendicular anisotropy trilayer nanowires. Journal Physics D: Applied Physics, 2014, 47, 105005.	2.8	7
143	Current-driven spin orbit field in $\text{LaAlO}_3/\text{SrTiO}_3$ heterostructures. Applied Physics Letters, 2014, 105, .	3.3	52
144	Determination of intrinsic spin Hall angle in Pt. Applied Physics Letters, 2014, 105, .	3.3	176

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145	Observation of inverse spin Hall effect in bismuth selenide. <i>Physical Review B</i> , 2014, 90, .	3.2	158
146	Electrical detection of microwave assisted magnetization reversal by spin pumping. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	9
147	Band structure of magnonic crystals with defects: Brillouin spectroscopy and micromagnetic simulations. <i>Physical Review B</i> , 2014, 90, .	3.2	17
148	Effect of FePt on resonant behaviour of a near field transducer for high areal density heat assisted magnetic recording. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	5
149	Spin wave non-reciprocity and beating in permalloy by the time-resolved magneto-optical Kerr effect. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 385002.	2.8	2
150	Omnidirectional study of nanostructured glass packaging for solar modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2014, 22, 356-361.	8.1	11
151	Ion Implantation Challenges for Patterned Media at Areal Densities Over 5 Tbps. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 41-46.	2.1	7
152	Outdoor performance and durability testing of antireflecting and self-cleaning glass for photovoltaic applications. <i>Solar Energy</i> , 2014, 110, 231-238.	6.1	54
153	Investigation of the temperature-dependence of ferromagnetic resonance and spin waves in Co ₂ FeAl _{0.5} Si _{0.5} . <i>Applied Physics Letters</i> , 2014, 104, 232409.	3.3	23
154	Nonreciprocity engineering in magnetostatic spin waves. <i>Current Applied Physics</i> , 2014, 14, S129-S135.	2.4	22
155	An ultrathin multilayer TiN/SiN wear resistant coating for advanced magnetic tape drive heads. <i>Thin Solid Films</i> , 2014, 556, 354-360.	1.8	7
156	Preparation of Ag/TiO ₂ /SiO ₂ films via photo-assisted deposition and adsorptive self-assembly for catalytic bactericidal application. <i>Applied Surface Science</i> , 2014, 311, 582-592.	6.1	19
157	Strain-enhanced tunneling magnetoresistance in MgO magnetic tunnel junctions. <i>Scientific Reports</i> , 2014, 4, 6505.	3.3	36
158	Angular and temperature dependence of current induced spin-orbit effective fields in Ta/CoFeB/MgO nanowires. <i>Scientific Reports</i> , 2014, 4, 4491.	3.3	204
159	Large scale antireflective glass texturing using grid contacts in anodization methods. <i>Solar Energy Materials and Solar Cells</i> , 2013, 116, 9-13.	6.2	8
160	Characterization of magnetostatic surface spin waves in magnetic thin films: evaluation for microelectronic applications. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 111, 369-378.	2.3	25
161	Developing an (Al,Ti)N x C y Interlayer to Improve the Durability of the ta-C Coating on Magnetic Recording Heads. <i>Tribology Letters</i> , 2013, 50, 233-243.	2.6	9
162	Spin-Orbit Torques in Co/Pd Multilayer Nanowires. <i>Physical Review Letters</i> , 2013, 111, 246602.	7.8	135

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163	Antibacterial effect of light emitting diodes of visible wavelengths on selected foodborne pathogens at different illumination temperatures. International Journal of Food Microbiology, 2013, 166, 399-406.	4.7	135
164	Fabrication and characterization of nano-aperture VCSELs for 10 Tb/in ² magnetic storage densities. , 2013, , .		0
165	Electric-field-induced magnetization changes in Co/Al ₂ O ₃ granular multilayers. Physical Review B, 2013, 87, .	3.2	1
166	Control of domain wall motion at vertically etched nanotrench in ferromagnetic nanowires. Applied Physics Letters, 2013, 103, 252401.	3.3	0
167	Role of spin mixing conductance in spin pumping: Enhancement of spin pumping efficiency in Ta/Cu/Py structures. Applied Physics Letters, 2013, 103, .	3.3	80
168	Graphene/liquid crystal based terahertz phase shifters. Optics Express, 2013, 21, 21395.	3.4	84
169	Spin wave nonreciprocity for logic device applications. Scientific Reports, 2013, 3, 3160.	3.3	162
170	Giant magnetoresistance in single-layer graphene flakes with a gate-voltage-tunable weak antilocalization. Physical Review B, 2013, 88, .	3.2	42
171	Conductance modulation in topological insulator Bi ₂ Se ₃ thin films with ionic liquid gating. Applied Physics Letters, 2013, 103, .	3.3	32
172	Stochastic nonlinear electrical characteristics of graphene. Applied Physics Letters, 2013, 102, .	3.3	6
173	Heat assisted magnetic recording (HAMR) with nano-aperture VCSELs for 10 Tb/in ² magnetic storage density. , 2013, , .		2
174	Lateral displacement induced disorder in L10-FePt nanostructures by ion-implantation. Scientific Reports, 2013, 3, 1907.	3.3	25
175	Deep anisotropic LiNbO ₃ etching with SF ₆ /Ar inductively coupled plasmas. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	1.2	20
176	Shifting of surface plasmon resonance due to electromagnetic coupling between graphene and Au nanoparticles. Optics Express, 2012, 20, 19690.	3.4	43
177	Ultrathin Si/C graded layer to improve tribological properties of Co magnetic films. Applied Physics Letters, 2012, 101, 191601.	3.3	14
178	Detection of domain wall eigenfrequency in infinity-shaped magnetic nanostructures. Applied Physics Letters, 2012, 101, 062401.	3.3	4
179	Parallel-leaky capacitance equivalent circuit model for MgO magnetic tunnel junctions. Applied Physics Letters, 2012, 101, .	3.3	23
180	Observation of magnetocapacitance in ferromagnetic nanowires. Applied Physics Letters, 2012, 101, 052401.	3.3	3

#	ARTICLE	IF	CITATIONS
181	Phononic dispersion of a two-dimensional chessboard-patterned bicomponent array on a substrate. Applied Physics Letters, 2012, 101, 053102.	3.3	16
182	Metastable magnetic domain wall dynamics. New Journal of Physics, 2012, 14, 033010.	2.9	13
183	Disorder-free sputtering method on graphene. AIP Advances, 2012, 2, .	1.3	31
184	Universal scaling of resistivity in bilayer graphene. Applied Physics Letters, 2012, 101, 223111.	3.3	6
185	Tunneling behavior of bismuth telluride nanoplates in electrical transport. Chemical Physics Letters, 2012, 546, 125-128.	2.6	3
186	Characterization of near field transducers for high density heat assisted magnetic recording combined with FePt recording media. , 2012, , .		0
187	First-Order Reversal Curve Investigations on the Effects of Ion Implantation in Magnetic Media. IEEE Transactions on Magnetics, 2012, 48, 2753-2756.	2.1	11
188	Attenuation characteristics of spin-pumping signal due to traveling spin waves. Physical Review B, 2012, 85, .	3.2	22
189	A Novel Approach of Carbon Embedding in Magnetic Media for Future Head/Disk Interface. IEEE Transactions on Magnetics, 2012, 48, 1807-1812.	2.1	18
190	Ultrafine and High Aspect Ratio Metal Lines by Electron Beam Lithography for Silicon Solar Cell Metallisation. Energy Procedia, 2012, 15, 91-96.	1.8	3
191	The Effect of Dust on Transmission and Self-cleaning Property of Solar Panels. Energy Procedia, 2012, 15, 421-427.	1.8	66
192	Effect of angstrom-scale surface roughness on the self-assembly of polystyrene-polydimethylsiloxane block copolymer. Scientific Reports, 2012, 2, 617.	3.3	17
193	The role of Mg interface layer in MgO magnetic tunnel junctions with CoFe and CoFeB electrodes. AIP Advances, 2012, 2, .	1.3	21
194	Graphene induced tunability of the surface plasmon resonance. Applied Physics Letters, 2012, 100, .	3.3	97
195	Spacer-less, decoupled granular L10 FePt magnetic media using Arê€He sputtering gas. Journal of Applied Physics, 2012, 112, 113916.	2.5	4
196	Study of electromagnetic enhancement for surface enhanced Raman spectroscopy of SiC graphene. Applied Physics Letters, 2012, 100, 191601.	3.3	19
197	TiO ₂ Thin Films Prepared via Adsorptive Self-Assembly for Self-Cleaning Applications. ACS Applied Materials & Interfaces, 2012, 4, 1093-1102.	8.0	92
198	Effect of pretreatment of Si interlayer by energetic C+ ions on the improved nanotribological properties of magnetic head overcoat. Journal of Applied Physics, 2012, 111, .	2.5	20

#	ARTICLE	IF	CITATIONS
199	Nonlocal spin transport in single-walled carbon nanotube networks. <i>Physical Review B</i> , 2012, 85, .	3.2	16
200	Biaxial strain effect of spin dependent tunneling in MgO magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2012, 101, 042407.	3.3	18
201	Interference-mediated modulation of spin waves. <i>Physical Review B</i> , 2012, 85, .	3.2	17
202	Development of a ta-C Wear Resistant Coating with Composite Interlayer for Recording Heads of Magnetic Tape Drives. <i>Tribology Letters</i> , 2012, 46, 221-232.	2.6	10
203	A practical superhydrophilic self cleaning and antireflective surface for outdoor photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 2012, 98, 46-51.	6.2	160
204	Negative Tunneling Magnetoresistance by Canted Magnetization in MgO/NiO Tunnel Barriers. <i>Physical Review Letters</i> , 2011, 106, 167201.	7.8	28
205	Effect of pre-treatment of the substrate surface by energetic C ⁺ ion bombardment on structure and nano-tribological characteristics of ultra-thin tetrahedral amorphous carbon (ta-C) protective coatings. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 115502.	2.8	20
206	Enhancement of optical transmission with random nanohole structures. <i>Optics Express</i> , 2011, 19, A35.	3.4	35
207	Tunable metal-insulator transitions in bilayer graphene by thermal annealing. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	16
208	Substrate bias effect on AlO _x -based magnetic tunnel junctions. <i>Journal of Physics: Conference Series</i> , 2011, 266, 012105.	0.4	0
209	Magnetic field control of hysteretic switching in Co/Al ₂ O ₃ multilayers by carrier injection. <i>AIP Advances</i> , 2011, 1, .	1.3	4
210	Overcoat Free Magnetic Media for Lower Magnetic Spacing and Improved Tribological Properties for Higher Areal Densities. <i>Tribology Letters</i> , 2011, 43, 247-256.	2.6	21
211	Frictional characteristics of exfoliated and epitaxial graphene. <i>Carbon</i> , 2011, 49, 4070-4073.	10.3	116
212	Self-cleaning and antireflective packaging glass for solar modules. <i>Renewable Energy</i> , 2011, 36, 2489-2493.	8.9	151
213	Ion implantation induced modification of structural and magnetic properties of perpendicular media. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 365001.	2.8	11
214	Effect of carbon embedding on the tribological properties of magnetic media surface with and without a perfluoropolyether (PFPE) layer. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 315301.	2.8	8
215	The role of charge traps in inducing hysteresis: Capacitance-voltage measurements on top gated bilayer graphene. <i>Applied Physics Letters</i> , 2011, 99, 083109.	3.3	66
216	Spin waves interference from rising and falling edges of electrical pulses. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	13

#	ARTICLE	IF	CITATIONS
217	Magnetic and structural properties of CoCrPt/SiO ₂ -based graded media prepared by ion implantation. <i>Journal of Applied Physics</i> , 2011, 110, 083917.	2.5	20
218	Effect of annealing and applied bias on barrier shape in CoFe/MgO/CoFe tunnel junctions. <i>Physical Review B</i> , 2011, 83, .	3.2	16
219	Coexistence of the Kondo effect and a ferromagnetic phase in magnetic tunnel junctions. <i>Physical Review B</i> , 2011, 83, .	3.2	19
220	Design and fabrication of high efficiency power coupler between different photonic crystal waveguides. <i>Applied Physics Letters</i> , 2011, 98, 241102.	3.3	8
221	Effect of nonadiabatic spin transfer torque on domain wall resonance frequency and mass. <i>Applied Physics Letters</i> , 2011, 98, 092501.	3.3	14
222	Spin Transfer Torque in Ferromagnet-Normal Metal-Antiferromagnet Junctions. <i>Journal of Magnetism and Magnetic Materials</i> , 2011, 16, 92-96.	0.4	1
223	Extremely long quasiparticle spin lifetimes in superconducting aluminium using MgO tunnel spin injectors. <i>Nature Materials</i> , 2010, 9, 586-593.	27.5	102
224	Tunneling characteristics of graphene. <i>Applied Physics Letters</i> , 2010, 97, 252102.	3.3	13
225	Omnidirectional optical transmission by optimized nano-structures of solar cells. , 2010, , .		0
226	Ambipolar bistable switching effect of graphene. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	30
227	Semiconducting α -FeSi ₂ for high efficiency and low cost photovoltaics. , 2010, , .		0
228	Surface-Energy Engineering of Graphene. <i>Langmuir</i> , 2010, 26, 3798-3802.	3.5	426
229	Spin wave assisted current induced magnetic domain wall motion. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	49
230	Current-Induced Control of Spin-Wave Attenuation. <i>Physical Review Letters</i> , 2009, 102, 147202.	7.8	94
231	Crossover from Kondo-Assisted Suppression to Co-Tunneling Enhancement of Tunneling Magnetoresistance via Ferromagnetic Nanodots in MgO Tunnel Barriers. <i>Nano Letters</i> , 2008, 8, 340-344.	9.1	57
232	Optimized thickness of superconducting aluminum electrodes for measurement of spin polarization with MgO tunnel barriers. <i>Applied Physics Letters</i> , 2007, 90, 202502.	3.3	10
233	Sign of tunneling magnetoresistance in CrO ₂ -based magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2007, 91, 252506.	3.3	27
234	Evanescent-coupled GaInNAsSb in-line fibre photodetectors. <i>IET Optoelectronics</i> , 2007, 1, 175-177.	3.3	0

#	ARTICLE	IF	CITATIONS
235	Photoluminescence and electroabsorption in GaNAs ^x GaAsSb heterojunctions. Electronics Letters, 2006, 42, 52.	1.0	0
236	Tunneling spin polarization measurements from ferromagnet/MgO tunnel junctions using NbN superconductor. Applied Physics Letters, 2006, 88, 182501.	3.3	10
237	Role of Tunneling Matrix Elements in Determining the Magnitude of the Tunneling Spin Polarization of 3d Transition Metal Ferromagnetic Alloys. Physical Review Letters, 2005, 94, .	7.8	44