

Hyunsoo Yang

List of Publications by Year in descending order

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papers

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docs citations

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times ranked

10621
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface-Energy Engineering of Graphene. <i>Langmuir</i> , 2010, 26, 3798-3802.	1.6	426
2	The 2021 Magnonics Roadmap. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 413001.	0.7	287
3	Direct Observation of the Dzyaloshinskii-Moriya Interaction in a Pt/Co/Ni Film. <i>Physical Review Letters</i> , 2015, 114, 047201.	2.9	284
4	Spin-orbit-torque engineering via oxygen manipulation. <i>Nature Nanotechnology</i> , 2015, 10, 333-338.	15.6	271
5	Room temperature magnetization switching in topological insulator-ferromagnet heterostructures by spin-orbit torques. <i>Nature Communications</i> , 2017, 8, 1364.	5.8	271
6	Topological Surface States Originated Spin-Orbit Torques in $\text{Bi}_2\text{Te}_3/\text{Pt}$ Heterostructures. <i>Physical Review Letters</i> , 2015, 114, 257202.	2.9	269
7	Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures. <i>Nature Materials</i> , 2018, 17, 1087-1094.	13.3	265
8	Roadmap of Spin-Orbit Torques. <i>IEEE Transactions on Magnetics</i> , 2021, 57, 1-39.	1.2	225
9	Observation of stable Néel skyrmions in cobalt/palladium multilayers with Lorentz transmission electron microscopy. <i>Nature Communications</i> , 2017, 8, 14761.	5.8	222
10	Angular and temperature dependence of current induced spin-orbit effective fields in Ta/CoFeB/MgO nanowires. <i>Scientific Reports</i> , 2014, 4, 4491.	1.6	204
11	Anomalous Current-Induced Spin Torques in Ferrimagnets near Compensation. <i>Physical Review Letters</i> , 2017, 118, 167201.	2.9	192
12	High-Performance THz Emitters Based on Ferromagnetic/Nonmagnetic Heterostructures. <i>Advanced Materials</i> , 2017, 29, 1603031.	11.1	183
13	All-electric magnetization switching and Dzyaloshinskii-Moriya interaction in $\text{WTe}_2/\text{ferromagnet}$ heterostructures. <i>Nature Nanotechnology</i> , 2019, 14, 945-949.	15.6	177
14	Determination of intrinsic spin Hall angle in Pt. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	176
15	Recent advances in spin-orbit torques: Moving towards device applications. <i>Applied Physics Reviews</i> , 2018, 5, 031107.	5.5	176
16	Spin wave nonreciprocity for logic device applications. <i>Scientific Reports</i> , 2013, 3, 3160.	1.6	162
17	Nonvolatile infrared memory in MoS_2/PbS van der Waals heterostructures. <i>Science Advances</i> , 2018, 4, eaap7916.	4.7	161
18	A practical superhydrophilic self cleaning and antireflective surface for outdoor photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 2012, 98, 46-51.	3.0	160

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19	Observation of inverse spin Hall effect in bismuth selenide. <i>Physical Review B</i> , 2014, 90, .	1.1	158
20	Self-cleaning and antireflective packaging glass for solar modules. <i>Renewable Energy</i> , 2011, 36, 2489-2493.	4.3	151
21	Ultrafast and energy-efficient spin-orbit torque switching in compensated ferrimagnets. <i>Nature Electronics</i> , 2020, 3, 37-42.	13.1	147
22	Spin-Orbit Torques in Co/Pd Multilayer Nanowires. <i>Physical Review Letters</i> , 2013, 111, 246602.	2.9	135
23	Antibacterial effect of light emitting diodes of visible wavelengths on selected foodborne pathogens at different illumination temperatures. <i>International Journal of Food Microbiology</i> , 2013, 166, 399-406.	2.1	135
24	Ferrimagnetic spintronics. <i>Nature Materials</i> , 2022, 21, 24-34.	13.3	129
25	Magnetization switching by magnon-mediated spin torque through an antiferromagnetic insulator. <i>Science</i> , 2019, 366, 1125-1128.	6.0	127
26	Interface Engineering and Emergent Phenomena in Oxide Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1802439.	11.1	118
27	Frictional characteristics of exfoliated and epitaxial graphene. <i>Carbon</i> , 2011, 49, 4070-4073.	5.4	116
28	Active Multifunctional Microelectromechanical System Metadevices: Applications in Polarization Control, Wavefront Deflection, and Holograms. <i>Advanced Optical Materials</i> , 2017, 5, 1600716.	3.6	116
29	Two-dimensional materials prospects for non-volatile spintronic memories. <i>Nature</i> , 2022, 606, 663-673.	13.7	116
30	Observation of the antiferromagnetic spin Hall effect. <i>Nature Materials</i> , 2021, 20, 800-804.	13.3	113
31	Bilinear magnetoelectric resistance as a probe of three-dimensional spin texture in topological surface states. <i>Nature Physics</i> , 2018, 14, 495-499.	6.5	108
32	Far out-of-equilibrium spin populations trigger giant spin injection into atomically thin MoS ₂ . <i>Nature Physics</i> , 2019, 15, 347-351.	6.5	105
33	Enhanced Spin-Orbit Torque via Modulation of Spin Current Absorption. <i>Physical Review Letters</i> , 2016, 117, 217206.	2.9	104
34	Extremely long quasiparticle spin lifetimes in superconducting aluminium using MgO tunnel spin injectors. <i>Nature Materials</i> , 2010, 9, 586-593.	13.3	102
35	Asymmetric spin-wave dispersion due to Dzyaloshinskii-Moriya interaction in an ultrathin Pt/CoFeB film. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	102
36	Graphene Terahertz Modulators by Ionic Liquid Gating. <i>Advanced Materials</i> , 2015, 27, 1874-1879.	11.1	98

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37	Graphene induced tunability of the surface plasmon resonance. Applied Physics Letters, 2012, 100, .	1.5	97
38	Current-Induced Control of Spin-Wave Attenuation. Physical Review Letters, 2009, 102, 147202.	2.9	94
39	TiO ₂ Thin Films Prepared via Adsorptive Self-Assembly for Self-Cleaning Applications. ACS Applied Materials & Interfaces, 2012, 4, 1093-1102.	4.0	92
40	Room-Temperature Giant Charge-to-Spin Conversion at the SrTiO ₃ /LaAlO ₃ Oxide Interface. Nano Letters, 2017, 17, 7659-7664.	4.5	91
41	Room-temperature nonlinear Hall effect and wireless radiofrequency rectification in Weyl semimetal TaIrTe ₄ . Nature Nanotechnology, 2021, 16, 421-425.	15.6	91
42	Ultrafast Spin-to-Charge Conversion at the Surface of Topological Insulator Thin Films. Advanced Materials, 2018, 30, e1802356.	11.1	90
43	Extremely large magnetoresistance in few-layer graphene/boron nitride heterostructures. Nature Communications, 2015, 6, 8337.	5.8	86
44	Long spin coherence length and bulk-like spin-orbit torque in ferrimagnetic multilayers. Nature Materials, 2019, 18, 29-34.	13.3	86
45	Characterization and Manipulation of Spin Orbit Torque in Magnetic Heterostructures. Advanced Materials, 2018, 30, e1705699.	11.1	85
46	Graphene/liquid crystal based terahertz phase shifters. Optics Express, 2013, 21, 21395.	1.7	84
47	Role of spin mixing conductance in spin pumping: Enhancement of spin pumping efficiency in Ta/Cu/Py structures. Applied Physics Letters, 2013, 103, .	1.5	80
48	Hf thickness dependence of spin-orbit torques in Hf/CoFeB/MgO heterostructures. Applied Physics Letters, 2016, 108, .	1.5	79
49	Coherent Subnanosecond Switching of Perpendicular Magnetization by the Fieldlike Spin-Orbit Torque without an External Magnetic Field. Physical Review Applied, 2015, 3, .	1.5	77
50	Spin orbit torques and Dzyaloshinskii-Moriya interaction in dual-interfaced Co-Ni multilayers. Scientific Reports, 2016, 6, 32629.	1.6	75
51	Large spin-orbit torques in Pt/Co-Ni/W heterostructures. Applied Physics Letters, 2016, 109, .	1.5	71
52	Extrinsic Spin Hall Effect in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">Cu$ \rangle	1.5	71
53	FMR-related phenomena in spintronic devices. Journal Physics D: Applied Physics, 2018, 51, 273002.	1.3	70
54	Anomalous spin-orbit torque switching due to field-like torque-assisted domain wall reflection. Science Advances, 2017, 3, e1603099.	4.7	68

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55	Nonlinear Planar Hall Effect. <i>Physical Review Letters</i> , 2019, 123, 016801.	2.9	67
56	The role of charge traps in inducing hysteresis: Capacitance-voltage measurements on top gated bilayer graphene. <i>Applied Physics Letters</i> , 2011, 99, 083109.	1.5	66
57	The Effect of Dust on Transmission and Self-cleaning Property of Solar Panels. <i>Energy Procedia</i> , 2012, 15, 421-427.	1.8	66
58	Electric-field control of spin accumulation direction for spin-orbit torques. <i>Nature Communications</i> , 2019, 10, 248.	5.8	61
59	Flexible MgO Barrier Magnetic Tunnel Junctions. <i>Advanced Materials</i> , 2016, 28, 4983-4990.	11.1	59
60	Terahertz Emission from Compensated Magnetic Heterostructures. <i>Advanced Optical Materials</i> , 2018, 6, 1800430.	3.6	59
61	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.	4.5	57
62	Static Magnetic Field Stimulation Enhances Oligodendrocyte Differentiation and Secretion of Neurotrophic Factors. <i>Scientific Reports</i> , 2017, 7, 6743.	1.6	57
63	Outdoor performance and durability testing of antireflecting and self-cleaning glass for photovoltaic applications. <i>Solar Energy</i> , 2014, 110, 231-238.	2.9	54
64	Efficient charge-spin conversion and magnetization switching through the Rashba effect at topological-insulator/Ag interfaces. <i>Physical Review B</i> , 2018, 97, .	1.1	53
65	Observation of Out-of-Plane Spin Texture in a SrTiO_3/Ag Heterostructure Review Letters, 2018, 120, 266802.		
66	Current-driven spin orbit field in $\text{LaAlO}_3/\text{SrTiO}_3$ heterostructures. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	52
67	Spin wave assisted current induced magnetic domain wall motion. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	49
68	Field-Free Spin-Orbit Torque Switching from Geometrical Domain-Wall Pinning. <i>Nano Letters</i> , 2018, 18, 4669-4674.	4.5	48
69	Quantum frequency doubling in the topological insulator Bi_2Se_3 . <i>Nature Communications</i> , 2021, 12, 698.	5.8	48
70	Role of Tunneling Matrix Elements in Determining the Magnitude of the Tunneling Spin Polarization of 3d Transition Metal Ferromagnetic Alloys. <i>Physical Review Letters</i> , 2005, 94, .	2.9	44
71	Shifting of surface plasmon resonance due to electromagnetic coupling between graphene and Au nanoparticles. <i>Optics Express</i> , 2012, 20, 19690.	1.7	43
72	Giant magnetoresistance in single-layer graphene flakes with a gate-voltage-tunable weak antilocalization. <i>Physical Review B</i> , 2013, 88, .	1.1	42

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73	Giant nonreciprocal emission of spin waves in Ta/Py bilayers. <i>Science Advances</i> , 2016, 2, e1501892.	4.7	41
74	Impact ionization by hot carriers in a black phosphorus field effect transistor. <i>Nature Communications</i> , 2018, 9, 3414.	5.8	41
75	Quantification of Mixed Bloch-Néel Topological Spin Textures Stabilized by the Dzyaloshinskii-Moriya Interaction in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Co} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{Pd} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{Multilayers}$. <i>Physical Review Letters</i> , 2019, 122, 237201.	2.9	40
76	Spin-Orbit Torque Magnetization Switching in MoTe ₂ /Permalloy Heterostructures. <i>Advanced Materials</i> , 2020, 32, e2002799.	11.1	40
77	Electrically connected spin-torque oscillators array for 2.4 GHz WiFi band transmission and energy harvesting. <i>Nature Communications</i> , 2021, 12, 2924.	5.8	40
78	Current-Enhanced Broadband THz Emission from Spintronic Devices. <i>Advanced Optical Materials</i> , 2019, 7, 1801608.	3.6	39
79	Optical manipulation of magnetic vortices visualized in situ by Lorentz electron microscopy. <i>Science Advances</i> , 2018, 4, eaat3077.	4.7	39
80	Nonlinear magnetotransport shaped by Fermi surface topology and convexity. <i>Nature Communications</i> , 2019, 10, 1290.	5.8	38
81	Defect-induced negative magnetoresistance and surface state robustness in the topological insulator $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{BiSbTeS} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{e} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review B</i> , 2014, 90, .		36
82	Strain-enhanced tunneling magnetoresistance in MgO magnetic tunnel junctions. <i>Scientific Reports</i> , 2014, 4, 6505.	1.6	36
83	Anisotropic Picosecond Spin-Photocurrent from Weyl Semimetal WTe ₂ . <i>ACS Nano</i> , 2020, 14, 3539-3545.	7.3	36
84	Enhancement of optical transmission with random nanohole structures. <i>Optics Express</i> , 2011, 19, A35.	1.7	35
85	Continuous Tuning of the Magnitude and Direction of Spin-Orbit Torque Using Bilayer Heavy Metals. <i>Advanced Electronic Materials</i> , 2016, 2, 1600210.	2.6	35
86	Enhancement of spin Hall effect induced torques for current-driven magnetic domain wall motion: Inner interface effect. <i>Physical Review B</i> , 2016, 93, .	1.1	35
87	Graphene moiré superlattices with giant quantum nonlinearity of chiral Bloch electrons. <i>Nature Nanotechnology</i> , 2022, 17, 378-383.	15.6	35
88	Room-Temperature Nanoseconds Spin Relaxation in WTe ₂ and MoTe ₂ Thin Films. <i>Advanced Science</i> , 2018, 5, 1700912.	5.6	34
89	Flexible terahertz modulator based on coplanar-gate graphene field-effect transistor structure. <i>Optics Letters</i> , 2016, 41, 816.	1.7	33
90	Conductance modulation in topological insulator Bi ₂ Se ₃ thin films with ionic liquid gating. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	32

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91	Oxygen-Migration-Based Spintronic Device Emulating a Biological Synapse. <i>Physical Review Applied</i> , 2019, 11, .	1.5	32
92	Disorder-free sputtering method on graphene. <i>AIP Advances</i> , 2012, 2, .	0.6	31
93	Ambipolar bistable switching effect of graphene. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	30
94	Direct visualization of current-induced spin accumulation in topological insulators. <i>Nature Communications</i> , 2018, 9, 2492.	5.8	30
95	Current-induced Out-of-plane Spin Accumulation on the (001) Surface of the $\text{Mn}_3\text{Antiferromagnet}$. <i>Physical Review Applied</i> , 2019, 12, .	1.5	30
96	Bloch Chirality Induced by an Interlayer Dzyaloshinskii-Moriya Interaction in Ferromagnetic Multilayers. <i>Physical Review Letters</i> , 2020, 125, 227203.	2.9	30
97	Negative Tunneling Magnetoresistance by Canted Magnetization in MgO/NiO Tunnel Barriers. <i>Physical Review Letters</i> , 2011, 106, 167201.	2.9	28
98	In-plane angular dependence of the spin-wave nonreciprocity of an ultrathin film with Dzyaloshinskii-Moriya interaction. <i>Applied Physics Letters</i> , 2015, 107, 022402.	1.5	28
99	Oscillatory spin-orbit torque switching induced by field-like torques. <i>Communications Physics</i> , 2018, 1, .	2.0	28
100	Sign of tunneling magnetoresistance in CrO_2 -based magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2007, 91, 252506.	1.5	27
101	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.	1.1	25
102	Lateral displacement induced disorder in L10-FePt nanostructures by ion-implantation. <i>Scientific Reports</i> , 2013, 3, 1907.	1.6	25
103	Combination of red and blue light induces anthocyanin and other secondary metabolite biosynthesis pathways in an age-dependent manner in Batavia lettuce. <i>Plant Science</i> , 2021, 310, 110977.	1.7	25
104	Spin orbit torque driven magnetization switching with sputtered Bi_2Se_3 spin current source. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 224001.	1.3	24
105	Superluminal-like magnon propagation in antiferromagnetic NiO at nanoscale distances. <i>Nature Nanotechnology</i> , 2021, 16, 1337-1341.	15.6	24
106	Parallel-leaky capacitance equivalent circuit model for MgO magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	23
107	Investigation of the temperature-dependence of ferromagnetic resonance and spin waves in $\text{Co}_2\text{FeAlO}_5\text{SiO}_5$. <i>Applied Physics Letters</i> , 2014, 104, 232409.	1.5	23
108	Observation of the Out-of-Plane Polarized Spin Current from CVD Grown WTe_2 . <i>Advanced Quantum Technologies</i> , 2021, 4, 2100038.	1.8	23

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109	Attenuation characteristics of spin-pumping signal due to traveling spin waves. Physical Review B, 2012, 85, .	1.1	22
110	Nonreciprocity engineering in magnetostatic spin waves. Current Applied Physics, 2014, 14, S129-S135.	1.1	22
111	Sub-Picosecond Carrier Dynamics Induced by Efficient Charge Transfer in MoTe ₂ /WTe ₂ van der Waals Heterostructures. ACS Nano, 2019, 13, 9587-9594.	7.3	22
112	Boosting contact sliding and wear protection via atomic intermixing and tailoring of nanoscale interfaces. Science Advances, 2019, 5, eaau7886.	4.7	22
113	Overcoat Free Magnetic Media for Lower Magnetic Spacing and Improved Tribological Properties for Higher Areal Densities. Tribology Letters, 2011, 43, 247-256.	1.2	21
114	The role of Mg interface layer in MgO magnetic tunnel junctions with CoFe and CoFeB electrodes. AIP Advances, 2012, 2, .	0.6	21
115	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, .	1.5	21
116	Helicity-Dependent Photovoltaic Effect in Bi ₂ Se ₃ Under Normal Incident Light. Advanced Optical Materials, 2016, 4, 1642-1650.	3.6	21
117	Anomalous Photothermoelectric Transport Due to Anisotropic Energy Dispersion in WTe ₂ . Nano Letters, 2019, 19, 2647-2652.	4.5	21
118	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. Journal Physics D: Applied Physics, 2011, 44, 115502.	1.3	20
119	Magnetic and structural properties of CoCrPt-SiO ₂ -based graded media prepared by ion implantation. Journal of Applied Physics, 2011, 110, 083917.	1.1	20
120	Deep anisotropic LiNbO ₃ etching with SF ₆ /Ar inductively coupled plasmas. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	0.6	20
121	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, .	1.1	20
122	Eigenmodes of Néel skyrmions in ultrathin magnetic films. AIP Advances, 2017, 7, 055212.	0.6	20
123	Topological-insulator-based terahertz modulator. Scientific Reports, 2017, 7, 13486.	1.6	20
124	Emerging Spintronics Phenomena and Applications. IEEE Transactions on Magnetics, 2021, 57, 1-34.	1.2	20
125	Magnetotransport of Weyl semimetals with tilted Dirac cones. New Journal of Physics, 2020, 22, 083081.	1.2	20
126	Coexistence of the Kondo effect and a ferromagnetic phase in magnetic tunnel junctions. Physical Review B, 2011, 83, .	1.1	19

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127	Study of electromagnetic enhancement for surface enhanced Raman spectroscopy of SiC graphene. Applied Physics Letters, 2012, 100, 191601.	1.5	19
128	Preparation of Ag/TiO ₂ /SiO ₂ films via photo-assisted deposition and adsorptive self-assembly for catalytic bactericidal application. Applied Surface Science, 2014, 311, 582-592.	3.1	19
129	Microscopic origin of spin-orbit torque in ferromagnetic heterostructures: A first-principles approach. Physical Review B, 2020, 101, .	1.1	19
130	A Novel Approach of Carbon Embedding in Magnetic Media for Future Head/Disk Interface. IEEE Transactions on Magnetics, 2012, 48, 1807-1812.	1.2	18
131	Biaxial strain effect of spin dependent tunneling in MgO magnetic tunnel junctions. Applied Physics Letters, 2012, 101, 042407.	1.5	18
132	Slippery and Wear-Resistant Surfaces Enabled by Interface Engineered Graphene. Nano Letters, 2020, 20, 905-917.	4.5	18
133	Effect of angstrom-scale surface roughness on the self-assembly of polystyrene-polydimethylsiloxane block copolymer. Scientific Reports, 2012, 2, 617.	1.6	17
134	Interference-mediated modulation of spin waves. Physical Review B, 2012, 85, .	1.1	17
135	Band structure of magnonic crystals with defects: Brillouin spectroscopy and micromagnetic simulations. Physical Review B, 2014, 90, .	1.1	17
136	Tunable metal-insulator transitions in bilayer graphene by thermal annealing. Applied Physics Letters, 2011, 98, .	1.5	16
137	Effect of annealing and applied bias on barrier shape in CoFe/MgO/CoFe tunnel junctions. Physical Review B, 2011, 83, .	1.1	16
138	Phononic dispersion of a two-dimensional chessboard-patterned bicomponent array on a substrate. Applied Physics Letters, 2012, 101, 053102.	1.5	16
139	Nonlocal spin transport in single-walled carbon nanotube networks. Physical Review B, 2012, 85, .	1.1	16
140	Synchronization of spin-transfer torque oscillators by spin pumping, inverse spin Hall, and spin Hall effects. Journal of Applied Physics, 2015, 117, 063907.	1.1	16
141	Effect of nonadiabatic spin transfer torque on domain wall resonance frequency and mass. Applied Physics Letters, 2011, 98, 092501.	1.5	14
142	Ultrathin Si/C graded layer to improve tribological properties of Co magnetic films. Applied Physics Letters, 2012, 101, 191601.	1.5	14
143	Highly efficient charge-to-spin conversion from <i>in situ</i> Bi ₂ Se ₃ /Fe heterostructures. Applied Physics Letters, 2021, 118, .	1.5	14
144	Origin and enhancement of the spin Hall angle in the Weyl semimetals LaAlSi and LaAlGe. Physical Review B, 2021, 104, .	1.1	14

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145	Tunneling characteristics of graphene. Applied Physics Letters, 2010, 97, 252102.	1.5	13
146	Spin waves interference from rising and falling edges of electrical pulses. Applied Physics Letters, 2011, 99, .	1.5	13
147	Metastable magnetic domain wall dynamics. New Journal of Physics, 2012, 14, 033010.	1.2	13
148	Interfacial Rashba magnetoresistance of the two-dimensional electron gas at the $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Physical Review B, 2017, 96, .	1.1	13
149	Field-Free Switching of Perpendicular Magnetization Through Spin Hall and Anomalous Hall Effects in Ferromagnet/Heavy-Metal/Ferromagnet Structures. Physical Review Applied, 2019, 12, .	1.5	12
150	Spin Nernst and anomalous Nernst effects and their signature outputs in ferromagnet/nonmagnet heterostructures. Physical Review B, 2020, 102, .	1.1	12
151	Ion implantation induced modification of structural and magnetic properties of perpendicular media. Journal Physics D: Applied Physics, 2011, 44, 365001.	1.3	11
152	First-Order Reversal Curve Investigations on the Effects of Ion Implantation in Magnetic Media. IEEE Transactions on Magnetics, 2012, 48, 2753-2756.	1.2	11
153	Omnidirectional study of nanostructured glass packaging for solar modules. Progress in Photovoltaics: Research and Applications, 2014, 22, 356-361.	4.4	11
154	Effect of $\text{Co}_x\text{Fe}_{1-x}\text{B}_{20}$ composition. Physical Review Applied, 2018, 10, .	1.5	11
155	Magnon-versus Electron-Mediated Spin-Transfer Torque Exerted by Spin Current across an Antiferromagnetic Insulator to Switch the Magnetization of an Adjacent Ferromagnetic Metal. Physical Review Applied, 2021, 15, .	1.5	11
156	Tunneling spin polarization measurements from ferromagnet/MgO tunnel junctions using NbN superconductor. Applied Physics Letters, 2006, 88, 182501.	1.5	10
157	Optimized thickness of superconducting aluminum electrodes for measurement of spin polarization with MgO tunnel barriers. Applied Physics Letters, 2007, 90, 202502.	1.5	10
158	Development of a ta-C Wear Resistant Coating with Composite Interlayer for Recording Heads of Magnetic Tape Drives. Tribology Letters, 2012, 46, 221-232.	1.2	10
159	Localized surface plasmon resonance in graphene nanomesh with Au nanostructures. Applied Physics Letters, 2016, 109, 041106.	1.5	10
160	Effect of surface state hybridization on current-induced spin-orbit torque in thin topological insulator films. Scientific Reports, 2017, 7, 792.	1.6	10
161	Tuning of current-induced effective magnetic field through Rashba effect engineering in hybrid multiferroic structures. NPC Asia Materials, 2018, 10, 740-748.	3.8	10
162	Developing an (Al,Ti)N x C y Interlayer to Improve the Durability of the ta-C Coating on Magnetic Recording Heads. Tribology Letters, 2013, 50, 233-243.	1.2	9

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163	Electrical detection of microwave assisted magnetization reversal by spin pumping. Applied Physics Letters, 2014, 104, .	1.5	9
164	Effect of carbon embedding on the tribological properties of magnetic media surface with and without a perfluoropolyether (PFPE) layer. Journal Physics D: Applied Physics, 2011, 44, 315301.	1.3	8
165	Design and fabrication of high efficiency power coupler between different photonic crystal waveguides. Applied Physics Letters, 2011, 98, 241102.	1.5	8
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167	Improvement of chemical ordering and magnetization dynamics of Co ²⁺ Fe ²⁺ Al ³⁺ Si Heusler alloy thin films by changing adjacent layers. RSC Advances, 2016, 6, 77811-77817.	1.7	8
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