Kyoung-Whan Kim

List of Publications by Year
in descending order

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53	2,234	304368	214527
papers	citations	22 h-index	47 g-index

55	55	55	2515
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Field-free switching of perpendicular magnetization through spinâ€“orbit torque in antiferromagnet/ferromagnet/oxide structures. Nature Nanotechnology, 2016, 11, 878-884.	15.6	438
2	Spin-wave propagation in the presence of interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2013, 88, .	1.1	267
3	Magnetization dynamics induced by in-plane currents in ultrathin magnetic nanostructures with Rashba spin-orbit coupling. Physical Review B, 2012, 85, .	1.1	203
4	Chirality from Interfacial Spin-Orbit Coupling Effects in Magnetic Bilayers. Physical Review Letters, 2013, 111, 216601.	2.9	166
5	Prediction of Giant Spin Motive Force due to Rashba Spin-Orbit Coupling. Physical Review Letters, 2012, 108, 217202.	2.9	90
6	Long-range chiral exchange interaction in synthetic antiferromagnets. Nature Materials, 2019, 18, 703-708.	13.3	83
7	Rashba Effect in Functional Spintronic Devices. Advanced Materials, 2020, 32, e2002117.	11.1	77
8	Current-induced motion of a transverse magnetic domain wall in the presence of spin Hall effect. Applied Physics Letters, 2012, 101, .	1.5	75
9	Exploitable Magnetic Anisotropy of the Two-Dimensional Magnet CrI₃. Nano Letters, 2020, 20, 929-935.	4.5	69
10	Spin-orbit torques from interfacial spin-orbit coupling for various interfaces. Physical Review B, 2017, 96, .	1.1	64
11	Asymmetric skyrmion Hall effect in systems with a hybrid Dzyaloshinskii-Moriya interaction. Physical Review B, 2018, 97, .	1.1	55
12	Simultaneous control of the Dzyaloshinskii-Moriya interaction and magnetic anisotropy in nanomagnetic trilayers. Physical Review Letters, 2017, 119, 077205.	2.9	51
13	Understanding the Giant Enhancement of Exchange Interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Bi</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Heterostructures. Physical Review Letters, 2017, 119, 027201.	2.9	47
14	Prediction of ferroelectricity-driven Berry curvature enabling charge- and spin-controllable photocurrent in tin telluride monolayers. Nature Communications, 2019, 10, 3965.	5.8	47
15	Exchange Bias in Weakly Interlayer-Coupled van der Waals Magnet Fe₃GeTe₂. Nano Letters, 2021, 21, 1672-1678.	4.5	43
16	Self-consistent calculation of spin transport and magnetization dynamics. Physics Reports, 2013, 531, 89-113.	10.3	36
17	Electric-field control of field-free spin-orbit torque switching via laterally modulated Rashba effect in Pt/Co/AlOx structures. Nature Communications, 2021, 12, 7111.	5.8	36
18	Elusive Dzyaloshinskii-Moriya interaction in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:m Physical Review B, 2020, 102, .	1.1	32

#	Article	IF	Citations
19	Perpendicular magnetic anisotropy of two-dimensional Rashba ferromagnets. Physical Review B, 2016, 94, .	1.1	30
20	Bloch Chirality Induced by an Interlayer Dzyaloshinskii-Moriya Interaction in Ferromagnetic Multilayers. Physical Review Letters, 2020, 125, 227203.	2.9	30
21	Topological Characterization of Classical Waves: The Topological Origin of Magnetostatic Surface Spin Waves. Physical Review Letters, 2019, 122, 217201.	2.9	25
22	Generalized Spin Drift-Diffusion Formalism in the Presence of Spin-Orbit Interaction of Ferromagnets. Physical Review Letters, 2020, 125, 207205.	2.9	23
23	Stability and dynamics of in-plane skyrmions in collinear ferromagnets. Physical Review B, 2020, 101, .	1.1	22
24	Intrinsic spin torque without spin-orbit coupling. Physical Review B, 2015, 92, .	1.1	16
25	Enhanced perpendicular magnetocrystalline anisotropy energy in an artificial magnetic material with bulk spin-momentum coupling. Physical Review B, 2019, 99, .	1.1	16
26	Theory of Kondo suppression of spin polarization in nonlocal spin valves. Physical Review B, 2017, 95, .	1.1	13
27	Chiral magnetoresistance in Pt/Co/Pt zigzag wires. Applied Physics Letters, 2017, 110, .	1.5	13
28	Negative spin Hall magnetoresistance of normal metal/ferromagnet bilayers. Nature Communications, 2020, 11, 3619.	5.8	13
29	Orbital Dynamics in Centrosymmetric Systems. Physical Review Letters, 2022, 128, 176601.	2.9	12
30	Spin-orbit-torque-induced skyrmion dynamics for different types of spin-orbit coupling. Journal of Magnetism and Magnetic Materials, 2018, 455, 14-18.	1.0	11
31	Effect of spin diffusion on current generated by spin motive force. Physical Review B, 2011, 84, .	1.1	10
32	Roles of chiral renormalization on magnetization dynamics in chiral magnets. Physical Review B, 2018, 97, .	1.1	10
33	Spin transparency for the interface of an ultrathin magnet within the spin dephasing length. Physical Review B, 2019, 99, .	1.1	10
34	Unidirectional Magnon-Driven Domain Wall Motion Due to the Interfacial Dzyaloshinskii-Moriya Interaction. Physical Review Letters, 2019, 122, 147202.	2.9	10
35	Role of orbital hybridization in anisotropic magnetoresistance. Physical Review B, 2020, 101, .	1.1	10
36	Intrinsic origin of interfacial second-order magnetic anisotropy in ferromagnet/normal metal heterostructures. NPG Asia Materials, 2020, 12, .	3.8	9

#	Article	IF	Citations
37	Numerical computation of spin-transfer torques for antiferromagnetic domain walls. Physical Review B, 2020, 101, .	1.1	9
38	Spin Swapping Effect of Band Structure Origin in Centrosymmetric Ferromagnets. Physical Review Letters, 2022, 129, .	2.9	9
39	SHE's electric. Nature Physics, 2014, 10, 549-550.	6.5	7
40	Chiral damping. Nature Materials, 2016, 15, 253-254.	13.3	7
41	Interfacial atomic layers for full emergence of interfacial Dzyaloshinskiiâ€“Moriya interaction. NPG Asia Materials, 2020, 12, .	3.8	7
42	Interface Engineering of Magnetic Anisotropy in van der Waals Ferromagnet-based Heterostructures. ACS Nano, 2021, 15, 16395-16403.	7.3	7
43	Direct observation of spin accumulation and spin-orbit torque driven by Rashba-Edelstein effect in an InAs quantum-well layer. Physical Review B, 2021, 104, .	1.1	7
44	Effect of the spin-orbit interaction at insulator/ferromagnet interfaces on spin-orbit torques. Physical Review B, 2021, 103, .	1.1	5
45	Effect of Rashba interaction at normal metal/insulator interface on spin-orbit torque of ferromagnet/normal metal/insulator trilayers. Current Applied Physics, 2019, 19, 1362-1366.	1.1	4
46	Non-equilibrium chiral domain wall dynamics excited by transverse magnetic field pulses. Journal of Physics Condensed Matter, 2021, 33, 015803.	0.7	3
47	Enhanced spinâ€“orbit torque in Ni81Fe19/Pt bilayer with NdNiO3 contact. Applied Physics Letters, 2021, 119, .	1.5	2
48	Thermal fluctuation field for current-induced domain wall motion. Physical Review B, 2010, 82, .	1.1	1
49	Electrical Detection of Polarity and Chirality of a Magnetic Vortex Using Spin-Motive Force Caused by Rashba Spinâ€“Orbit Coupling. Applied Physics Express, 2012, 5, 123002.	1.1	1
50	Vertical transverse transport induced by hidden in-plane Berry curvature in two dimensions. Physical Review B, 2021, 104, .	1.1	1
51	Spin-orbit torques induced by spin Hall and spin swapping currents of a separate ferromagnet in a magnetic trilayer. Current Applied Physics, 2021, 29, 54-58.	1.1	1
52	Spin Transport. Physics and High Technology, 2011, 20, 27.	0.1	0
53	Detection and Control of the Effective Magnetic Field in a Caâ€Ðoped Bi 2 Se 3 Topological Insulator. Advanced Electronic Materials, 0, , 2101075.	2.6	0