Luqiao Liu

List of Publications by Year
in descending order

34	9,384	304701 22	377849 34
papers	citations	h-index	g-index

34	34	34	5192
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spin-Torque Switching with the Giant Spin Hall Effect of Tantalum. Science, 2012, 336, 555-558.	12.6	3,176
2	Current-Induced Switching of Perpendicularly Magnetized Magnetic Layers Using Spin Torque from the Spin Hall Effect. Physical Review Letters, 2012, 109, 096602.	7.8	1,354
3	Spin-Torque Ferromagnetic Resonance Induced by the Spin Hall Effect. Physical Review Letters, 2011, 106, 036601.	7.8	1,323
4	Spin transfer torque devices utilizing the giant spin Hall effect of tungsten. Applied Physics Letters, 2012, 101, 122404.	3.3	1,173
5	Room-Temperature Spin-Orbit Torque Switching Induced by a Topological Insulator. Physical Review Letters, 2017, 119, 077702.	7.8	357
6	Magnetic Oscillations Driven by the Spin Hall Effect in 3-Terminal Magnetic Tunnel Junction Devices. Physical Review Letters, 2012, 109, 186602.	7.8	306
7	Roadmap of Spinâ€“Orbit Torques. IEEE Transactions on Magnetics, 2021, 57, 1-39.	2.1	225
8	Spin-Orbit-Torque Efficiency in Compensated Ferrimagnetic Cobalt-Terbium Alloys. Physical Review Applied, 2016, 6, .	3.8	214
9	Current-Induced Domain Wall Motion in a Compensated Ferrimagnet. Physical Review Letters, 2018, 121, 057701.	7.8	163
10	Strong Coupling between Microwave Photons and Nanomagnet Magnons. Physical Review Letters, 2019, 123, 107702.	7.8	142
11	Gigahertz Frequency Antiferromagnetic Resonance and Strong Magnon-Magnon Coupling in the Layered Crystal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CrCl</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review Letters, 2019, 123, 047204.	7.8	118
12	Mutual control of coherent spin waves and magnetic domain walls in a magnonic device. Science, 2019, 366, 1121-1125.	12.6	115
13	Spin-polarized tunneling study of spin-momentum locking in topological insulators. Physical Review B, 2015, 91, .	3.2	108
14	Quantitative Study on Current-Induced Effect in an Antiferromagnet Insulator/Pt Bilayer Film. Physical Review Letters, 2019, 123, 247206.	7.8	88
15	Birefringence-like spin transport via linearly polarized antiferromagnetic magnons. Nature Nanotechnology, 2020, 15, 563-568.	31.5	85
16	Magnetic Domain Wall Based Synaptic and Activation Function Generator for Neuromorphic Accelerators. Nano Letters, 2020, 20, 1033-1040.	9.1	72
17	Spintronics with compensated ferrimagnets. Applied Physics Letters, 2020, 116, .	3.3	64
18	Spinâ€“Orbit Torque Switching in a Nearly Compensated Heusler Ferrimagnet. Advanced Materials, 2019, 31, e1805361.	21.0	45

#	Article	IF	Citations
19	Topological insulators for efficient spinâ€“orbit torques. APL Materials, 2021, 9, .	5.1	41
20	Large spin-orbit torque observed in epitaxial SrIrO3 thin films. Applied Physics Letters, 2019, 114, .	3.3	37
21	Spin-Orbit-Torque Switching Mediated by an Antiferromagnetic Insulator. Physical Review Applied, 2019, 11, .	3.8	31
22	Manipulation of Coupling and Magnon Transport in Magnetic Metal-Insulator Hybrid Structures. Physical Review Applied, 2020, 13, .	3.8	31
23	Control of NÃ©el Vector with Spin-Orbit Torques in an Antiferromagnetic Insulator with Tilted Easy Plane. Physical Review Letters, 2022, 129, .	7.8	20
24	Variable spin-charge conversion across metal-insulator transition. Nature Communications, 2020, 11, 476.	12.8	16
25	Resonant Spin Transmission Mediated by Magnons in a Magnetic Insulator Multilayer Structure. Advanced Materials, 2021, 33, e2008555.	21.0	13
26	Nonreciprocal Transmission of Incoherent Magnons with Asymmetric Diffusion Length. Nano Letters, 2021, 21, 7037-7043.	9.1	13
27	Ising Machine Based on Electrically Coupled Spin Hall Nano-Oscillators. Physical Review Applied, 2022, 17, .	3.8	12
28	Temperature-dependent spin Hall effect tunneling spectroscopy in platinum. Applied Physics Letters, 2019, 115, .	3.3	9
29	Tunable Magnonic Chern Bands and Chiral Spin Currents in Magnetic Multilayers. Physical Review Letters, 2022, 128, .	7.8	9
30	Direct Evidence of Spin Transfer Torque on Two-Dimensional Cobalt-Doped MoS₂ Ferromagnetic Material. ACS Applied Electronic Materials, 2020, 2, 1497-1504.	4.3	7
31	Magnetism and spin transport in platinum/scandium-substituted terbium iron garnet heterostructures. Physical Review Materials, 2021, 5, .	2.4	7
32	Current-induced switching of a ferromagnetic Weyl semimetal Co2MnGa. Applied Physics Letters, 2021, 119, .	3.3	7
33	Proposal for a Spin-Torque-Oscillator Maser Enabled by Microwave Photon-Spin Coupling. Physical Review Applied, 2021, 16, .	3.8	2
34	Electrical manipulation of spin pumping signal through nonlocal thermal magnon transport. Applied Physics Letters, 2019, 115, .	3.3	1