

Liang Liu

List of Publications by Year in descending order

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218381

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3942
citing authors

#	ARTICLE	IF	CITATIONS
1	Field-Free Switching of Perpendicular Magnetization Induced by Longitudinal Spin-Orbit-Torque Gradient. <i>Physical Review Applied</i> , 2022, 17, .	1.5	22
2	Room-temperature spin-orbit torque switching in a manganite-based heterostructure. <i>Physical Review B</i> , 2022, 105, .	1.1	12
3	Observation on Volatile and Nonvolatile Magnetic Reversions Mediated by Electric Current in Highly Conductive $Gd_{3Fe_{5}O_{12}}$. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7660-7666.	1.5	1
4	Field-free switching of magnetization induced by spin-orbit torque in Pt/CoGd/Pt thin film. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	4
5	Current-induced self-switching of perpendicular magnetization in CoPt single layer. <i>Nature Communications</i> , 2022, 13, .	5.8	33
6	Rashba-Edelstein Effect in the hBN Van Der Waals Interface for Magnetization Switching. <i>Advanced Materials</i> , 2022, 34, .	11.1	9
7	Giant spin torque efficiency in single-crystalline antiferromagnet $Mn_{2}Au$ films. <i>Science China Materials</i> , 2021, 64, 2029-2036.	3.5	2
8	Interface-engineered electron and hole tunneling. <i>Science Advances</i> , 2021, 7, .	4.7	25
9	Spin-Orbit Torque Switching of a High-Quality Perpendicularly Magnetized Ferrimagnetic Heusler $Mn_{3}Ge$ Film. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18294-18300.	4.0	13
10	Field-free magnetization switching induced by the unconventional spin-orbit torque from WTe_{2} . <i>APL Materials</i> , 2021, 9, .	2.2	35
11	Spin Glass State in Chemical Vapor-Deposited Crystalline $Cr_{2}Se_{3}$ Nanosheets. <i>Chemistry of Materials</i> , 2021, 33, 3851-3858.	3.2	21
12	Thermal Effect in Current-Induced Magnetization Switching and Out-of-Plane Effective Field Measurements. <i>ACS Applied Electronic Materials</i> , 2021, 3, 2483-2489.	2.0	5
13	Modulation of Spin-Orbit Torque from $SrRuO_{3}$ by Epitaxial-Strain-Induced Octahedral Rotation. <i>Advanced Materials</i> , 2021, 33, e2007114.	11.1	29
14	Spin-Orbit Torque-Induced Domain Nucleation for Neuromorphic Computing. <i>Advanced Materials</i> , 2021, 33, e2103672.	11.1	41
15	Electric Field Control of the Magnetic Weyl Fermion in an Epitaxial $SrRuO_{3}$ (111) Thin Film. <i>Advanced Materials</i> , 2021, 33, e2101316.	11.1	24
16	Symmetry-dependent field-free switching of perpendicular magnetization. <i>Nature Nanotechnology</i> , 2021, 16, 277-282.	15.6	145
17	Role of Interfacial Orbital Hybridization in Spin-Orbit-Torque Generation in Pt-Based Heterostructures. <i>Physical Review Applied</i> , 2020, 14, .	1.5	8
18	An Electronic Synapse Based on 2D Ferroelectric $CuInP_{2}S_{6}$. <i>Advanced Electronic Materials</i> , 2020, 6, 2000760.	2.6	57

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19	Magnetic asymmetry induced anomalous spin-orbit torque in IrMn. Physical Review B, 2020, 101, .	1.1	36
20	A van der Waals Synaptic Transistor Based on Ferroelectric Hf _{0.5} Zr _{0.5} O ₂ and 2D Tungsten Disulfide. Advanced Electronic Materials, 2020, 6, 2000057.	2.6	68
21	Electrical switching of perpendicular magnetization in a single ferromagnetic layer. Physical Review B, 2020, 101, .	1.1	66
22	Perpendicular Magnetic Anisotropy and Dzyaloshinskii-Moriya Interaction at an Oxide/Ferromagnetic Metal Interface. Physical Review Letters, 2020, 124, 217202.	2.9	27
23	Overcoming the Limits of the Interfacial Dzyaloshinskii-Moriya Interaction by Antiferromagnetic Order in Multiferroic Heterostructures. Advanced Materials, 2020, 32, e1904415.	11.1	34
24	Continuously controllable photoconductance in freestanding BiFeO ₃ by the macroscopic flexoelectric effect. Nature Communications, 2020, 11, 2571.	5.8	93
25	Thickness dependence of anomalous Hall conductivity in L ₁₀ -FePt thin film. Journal Physics D: Applied Physics, 2019, 52, 43LT02.	1.3	5
26	Free Field Electric Switching of Perpendicularly Magnetized Thin Film by Spin Current Gradient. ACS Applied Materials & Interfaces, 2019, 11, 30446-30452.	4.0	47
27	Current-induced magnetization switching in all-oxide heterostructures. Nature Nanotechnology, 2019, 14, 939-944.	15.6	139
28	Large spin-orbit torque efficiency enhanced by magnetic structure of collinear antiferromagnet IrMn. Science Advances, 2019, 5, eaau6696.	4.7	70
29	Topological Hall effect in ferrimagnetic CoTb single layer. Journal of Magnetism and Magnetic Materials, 2019, 487, 165316.	1.0	17
30	Artificial Synapses Based on Multiterminal Memtransistors for Neuromorphic Application. Advanced Functional Materials, 2019, 29, 1901106.	7.8	192
31	Giant Enhancements of Perpendicular Magnetic Anisotropy and Spin-Orbit Torque by a MoS ₂ Layer. Advanced Materials, 2019, 31, e1900776.	11.1	65
32	Piezoelectric control of resistance switching in VO ₂ /Pb(Zr _{0.52} Ti _{0.48})O ₃ heterostructure. Applied Physics Letters, 2019, 114, .	1.5	5
33	Emergence of Topological Hall Effect in a SrRuO ₃ Single Layer. Advanced Materials, 2019, 31, e1807008.	11.1	121
34	Spin-orbit torque in chemically disordered and L ₁₀ -ordered C _u multilayers. Physical Review Letters, 2019, 123, 097201.	0.9	17
35	Temperature dependence of shot noise in double barrier magnetic tunnel junctions. Physical Review B, 2018, 97, .	1.1	1
36	A superfine eutectic microstructure and the mechanical properties of CoCrFeNiMo _x high-entropy alloys. Journal of Materials Research, 2018, 33, 3258-3265.	1.2	79

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37	Tuning of current-induced effective magnetic field through Rashba effect engineering in hybrid multiferroic structures. NPG Asia Materials, 2018, 10, 740-748.	3.8	10
38	Interfacial antiferromagnetic coupling between SrRuO_3 and LaAlO_3 . Physical Review B, 2014, 89, 040407.	0.9	4
39	Effects of field annealing on Gilbert damping of polycrystalline CoFe thin films. Journal of Magnetism and Magnetic Materials, 2017, 441, 264-270.	1.0	9
40	Spin-flip noise due to nonequilibrium spin accumulation. Physical Review B, 2016, 93, .	1.1	4
41	Secrecy Wireless Information and Power Transfer in Fading Wiretap Channel. IEEE Transactions on Vehicular Technology, 2016, 65, 180-190.	3.9	141
42	Low frequency noise in asymmetric double barrier magnetic tunnel junctions with a top thin MgO layer. Chinese Physics B, 2015, 24, 078504.	0.7	3
43	Joint Power Control and Fronthaul Rate Allocation for Throughput Maximization in OFDMA-Based Cloud Radio Access Network. IEEE Transactions on Communications, 2015, 63, 4097-4110.	4.9	78
44	Optimized Uplink Transmission in Multi-Antenna C-RAN With Spatial Compression and Forward. IEEE Transactions on Signal Processing, 2015, 63, 5083-5095.	3.2	59
45	Collaborative Wireless Energy and Information Transfer in Interference Channel. IEEE Transactions on Wireless Communications, 2015, 14, 545-557.	6.1	92
46	Symmetry-dependent electron-electron interaction in coherent tunnel junctions resolved by measurements of zero-bias anomaly. Physical Review B, 2014, 90, .	1.1	5
47	Secrecy Wireless Information and Power Transfer With MISO Beamforming. IEEE Transactions on Signal Processing, 2014, 62, 1850-1863.	3.2	491
48	Joint Transmit Beamforming and Receive Power Splitting for MISO SWIPT Systems. IEEE Transactions on Wireless Communications, 2014, 13, 3269-3280.	6.1	448
49	Low frequency noise peak near magnon emission energy in magnetic tunnel junctions. AIP Advances, 2014, 4, .	0.6	2
50	Wireless Information Transfer with Opportunistic Energy Harvesting. IEEE Transactions on Wireless Communications, 2013, 12, 288-300.	6.1	578
51	Wireless Information and Power Transfer: A Dynamic Power Splitting Approach. IEEE Transactions on Communications, 2013, 61, 3990-4001.	4.9	491
52	Achieving Global Optimality for Weighted Sum-Rate Maximization in the K-User Gaussian Interference Channel with Multiple Antennas. IEEE Transactions on Wireless Communications, 2012, 11, 1933-1945.	6.1	84
53	Trapped Field and Related Properties in a Superconducting-Disk Magnetized by Pulse Field. IEEE Transactions on Applied Superconductivity, 2004, 14, 2025-2030.	1.1	6