

Liang Liu

List of Publications by Year in descending order

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53
papers

4,073
citations

218381

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all docs

53
docs citations

53
times ranked

3942
citing authors

#	ARTICLE	IF	CITATIONS
1	Wireless Information Transfer with Opportunistic Energy Harvesting. IEEE Transactions on Wireless Communications, 2013, 12, 288-300.	6.1	578
2	Wireless Information and Power Transfer: A Dynamic Power Splitting Approach. IEEE Transactions on Communications, 2013, 61, 3990-4001.	4.9	491
3	Secrecy Wireless Information and Power Transfer With MISO Beamforming. IEEE Transactions on Signal Processing, 2014, 62, 1850-1863.	3.2	491
4	Joint Transmit Beamforming and Receive Power Splitting for MISO SWIPT Systems. IEEE Transactions on Wireless Communications, 2014, 13, 3269-3280.	6.1	448
5	Artificial Synapses Based on Multiterminal Memtransistors for Neuromorphic Application. Advanced Functional Materials, 2019, 29, 1901106.	7.8	192
6	Symmetry-dependent field-free switching of perpendicular magnetization. Nature Nanotechnology, 2021, 16, 277-282.	15.6	145
7	Secrecy Wireless Information and Power Transfer in Fading Wiretap Channel. IEEE Transactions on Vehicular Technology, 2016, 65, 180-190.	3.9	141
8	Current-induced magnetization switching in all-oxide heterostructures. Nature Nanotechnology, 2019, 14, 939-944.	15.6	139
9	Emergence of Topological Hall Effect in a SrRuO ₃ Single Layer. Advanced Materials, 2019, 31, e1807008.	11.1	121
10	Continuously controllable photoconductance in freestanding BiFeO ₃ by the macroscopic flexoelectric effect. Nature Communications, 2020, 11, 2571.	5.8	93
11	Collaborative Wireless Energy and Information Transfer in Interference Channel. IEEE Transactions on Wireless Communications, 2015, 14, 545-557.	6.1	92
12	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
13	A superfine eutectic microstructure and the mechanical properties of CoCrFeNiMo high-entropy alloys. Journal of Materials Research, 2018, 33, 3258-3265.	1.2	79
14	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
15	Large spin-orbit torque efficiency enhanced by magnetic structure of collinear antiferromagnet IrMn. Science Advances, 2019, 5, eaau6696.	4.7	70
16	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
17	Electrical switching of perpendicular magnetization in a single ferromagnetic layer. Physical Review B, 2020, 101, .	1.1	66
18	Giant Enhancements of Perpendicular Magnetic Anisotropy and Spin-Orbit Torque by a MoS ₂ Layer. Advanced Materials, 2019, 31, e1900776.	11.1	65

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19	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
20	An Electronic Synapse Based on 2D Ferroelectric $\text{CuInP}_{2}\text{S}_{6}$. Advanced Electronic Materials, 2020, 6, 2000760.	2.6	57
21	Free Field Electric Switching of Perpendicularly Magnetized Thin Film by Spin Current Gradient. ACS Applied Materials & Interfaces, 2019, 11, 30446-30452.	4.0	47
22	Spin-Orbit Torque-Induced Domain Nucleation for Neuromorphic Computing. Advanced Materials, 2021, 33, e2103672.	11.1	41
23	Magnetic asymmetry induced anomalous spin-orbit torque in IrMn. Physical Review B, 2020, 101, .	1.1	36
24	Field-free magnetization switching induced by the unconventional spin-orbit torque from WTe ₂ . APL Materials, 2021, 9, .	2.2	35
25	Overcoming the Limits of the Interfacial Dzyaloshinskii-Moriya Interaction by Antiferromagnetic Order in Multiferroic Heterostructures. Advanced Materials, 2020, 32, e1904415.	11.1	34
26	Current-induced self-switching of perpendicular magnetization in CoPt single layer. Nature Communications, 2022, 13, .	5.8	33
27	Modulation of Spin-Orbit Torque from SrRuO_{3} by Epitaxial Strain-Induced Octahedral Rotation. Advanced Materials, 2021, 33, e2007114.	11.1	29
28	Perpendicular Magnetic Anisotropy and Dzyaloshinskii-Moriya Interaction at an Oxide/Ferromagnetic Metal Interface. Physical Review Letters, 2020, 124, 217202.	2.9	27
29	Interface-engineered electron and hole tunneling. Science Advances, 2021, 7, .	4.7	25
30	Electric Field Control of the Magnetic Weyl Fermion in an Epitaxial SrRuO_{3} (111) Thin Film. Advanced Materials, 2021, 33, e2101316.	11.1	24
31	Field-Free Switching of Perpendicular Magnetization Induced by Longitudinal Spin-Orbit-Torque Gradient. Physical Review Applied, 2022, 17, .	1.5	22
32	Spin Glass State in Chemical Vapor-Deposited Crystalline $\text{Cr}_{2}\text{Se}_{3}$ Nanosheets. Chemistry of Materials, 2021, 33, 3851-3858.	3.2	21
33	Topological Hall effect in ferrimagnetic CoTb single layer. Journal of Magnetism and Magnetic Materials, 2019, 487, 165316.	1.0	17
34	Spin-orbit torque in chemically disordered and L-ordered $\text{Cu}_{1-x}\text{Mn}_{x}\text{Fe}_{2}\text{S}_{4}$ thin films. Physical Review Applied, 2021, 15, 044002.	0.9	17
35	Spin-Orbit Torque Switching of a High-Quality Perpendicularly Magnetized Ferrimagnetic Heusler Mn_{3}Ge Film. ACS Applied Materials & Interfaces, 2021, 13, 18294-18300.	4.0	13
36	Room-temperature spin-orbit torque switching in a manganite-based heterostructure. Physical Review B, 2022, 105, .	1.1	12

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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	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
39	Rashba-Edelstein Effect in the hBN Van Der Waals Interface for Magnetization Switching. Advanced Materials, 2022, 34, .	11.1	9
40	Role of Interfacial Orbital Hybridization in Spin-Orbit-Torque Generation in Pt -Based Heterostructures. Physical Review Applied, 2020, 14, .	1.5	8
41	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
42	Symmetry-dependent electron-electron interaction in coherent tunnel junctions resolved by measurements of zero-bias anomaly. Physical Review B, 2014, 90, .	1.1	5
43	Thickness dependence of anomalous Hall conductivity in L_{10} -FePt thin film. Journal Physics D: Applied Physics, 2019, 52, 43LT02.	1.3	5
44	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
45	Thermal Effect in Current-Induced Magnetization Switching and Out-of-Plane Effective Field Measurements. ACS Applied Electronic Materials, 2021, 3, 2483-2489.	2.0	5
46	Spin-flip noise due to nonequilibrium spin accumulation. Physical Review B, 2016, 93, .	1.1	4
47	Interfacial antiferromagnetic coupling between $SrRuO_3$ and L_{10} and	0.9	4
48	Field-free switching of magnetization induced by spin-orbit torque in Pt/CoGd/Pt thin film. Applied Physics Letters, 2022, 120, .	1.5	4
49	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
50	Low frequency noise peak near magnon emission energy in magnetic tunnel junctions. AIP Advances, 2014, 4, .	0.6	2
51	Giant spin torque efficiency in single-crystalline antiferromagnet Mn ₂ Au films. Science China Materials, 2021, 64, 2029-2036.	3.5	2
52	Temperature dependence of shot noise in double barrier magnetic tunnel junctions. Physical Review B, 2018, 97, .	1.1	1
53	Observation on Volatile and Nonvolatile Magnetic Reversions Mediated by Electric Current in Highly Conductive Gd ₃ Fe ₅ O ₁₂ . Journal of Physical Chemistry C, 2022, 126, 7660-7666.	1.5	1