

# Ke Xia

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2512626/publications.pdf>

Version: 2024-02-01

116  
papers

4,065  
citations

126858

33  
h-index

123376

61  
g-index

117  
all docs

117  
docs citations

117  
times ranked

3775  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal-induced transverse current in collinear antiferromagnetic $\text{FeMn}$ . Applied Physics Letters, 2022, 120, .	1.5	3
2	Pseudo-Hermitian magnon-polariton system with a three-dimensional exceptional surface. Physical Review B, 2022, 106, .	1.1	5
3	First-principles study of the anomalous Hall effect based on exact muffin-tin orbitals. Physical Review B, 2021, 103, .	1.1	5
4	Learning Order Parameters from Videos of Skyrmion Dynamical Phases with Neural Networks. Physical Review Applied, 2021, 16, .	1.5	5
5	Remote Generation of Magnon Schrödinger Cat State via Magnon-Photon Entanglement. Physical Review Letters, 2021, 127, 087203.	2.9	80
6	Nonlinear level attraction of cavity axion polariton in antiferromagnetic topological insulator. Physical Review B, 2021, 104, .	1.1	9
7	Nonreciprocal coherent coupling of nanomagnets by exchange spin waves. Nano Research, 2021, 14, 2133-2138.	5.8	26
8	Anticipative Tracking with the Short-Term Synaptic Plasticity of Spintronic Devices. Physical Review Applied, 2020, 14, .	1.5	3
9	Torque-induced dispersive readout in a weakly coupled hybrid system. Physical Review B, 2020, 102, .	1.1	7
10	Andreev spectroscopy of the triplet-superconductor state in the Bi/Ni bilayer system. Physical Review B, 2020, 101, .	1.1	3
11	Electric Control of Fermi Arc Spin Transport in Individual Topological Semimetal Nanowires. Physical Review Letters, 2020, 124, 116802.	2.9	39
12	Steady Bell State Generation via Magnon-Photon Coupling. Physical Review Letters, 2020, 124, 053602.	2.9	132
13	Spintronic devices for neuromorphic computing. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	16
14	Detecting current-induced quantum magnetization fluctuations with a spin-torque nano-oscillator. Applied Physics Letters, 2020, 116, 072406.	1.5	0
15	First-principles study of magnon-phonon interactions in gadolinium iron garnet. Physical Review B, 2020, 101, .	1.1	21
16	Recurrent neural networks made of magnetic tunnel junctions. AIP Advances, 2020, 10, .	0.6	10
17	Magnon hybridization in ferrimagnetic heterostructures. Physical Review B, 2020, 102, .	1.1	6
18	Cavity-mediated dissipative spin-spin coupling. Physical Review B, 2019, 100, .	1.1	28

#	ARTICLE	IF	CITATIONS
19	Proper dissipative torques in antiferromagnetic dynamics. Europhysics Letters, 2019, 126, 67006.	0.7	23
20	Excitation of unidirectional exchange spin waves by a nanoscale magnetic grating. Physical Review B, 2019, 100, .	1.1	111
21	Control of ultrafast demagnetization rate and Gilbert damping driven by femtosecond laser-induced spin currents in $F_1$ $G_1$ $a_1$	1.1	19
22	A Spin-Orbit Torque Memristive Device. Advanced Electronic Materials, 2019, 5, 1800782.	2.6	51
23	Thermally induced monochromatic microwave generation in magnon polaritons. Physical Review B, 2019, 99, .	1.1	9
24	Charge-induced ferromagnetic phase transition and anomalous Hall effect in full $d$ -band nonmagnetic metals. Physical Review B, 2019, 99, .	1.1	9
25	Noncollinearity-modulated Electronic Properties of Monolayer CrI <sub>3</sub> . Physical Review Applied, 2019, 11, .	1.5	3
26	Interfacial spin Hall effect and spin swapping in Fe-Au bilayers from first principles. Physical Review B, 2019, 99, .	1.1	15
27	Memristors: A Spin-Orbit Torque Memristive Device (Adv. Electron. Mater. 4/2019). Advanced Electronic Materials, 2019, 5, 1970022.	2.6	4
28	Tuning non-Gilbert-type damping in FeGa films on MgO(001) via oblique deposition. New Journal of Physics, 2019, 21, 123001.	1.2	8
29	Charge Transport Properties of the Majorana Zero Mode Induced Noncollinear Spin Selective Andreev Reflection*. Chinese Physics Letters, 2019, 36, 107102.	1.3	1
30	Breakdown of the Sharvin limit in spin pumping with interfacial Rashba spin-orbit coupling. Physical Review B, 2019, 99, .	1.1	1
31	Control of magnetic anisotropy in epitaxial Co <sub>2</sub> MnAl thin films through piezo-voltage-induced strain. Journal of Applied Physics, 2019, 125, .	1.1	11
32	Long-distance propagation of short-wavelength spin waves. Nature Communications, 2018, 9, 738.	5.8	181
33	Nanoscale control of stripe-ordered magnetic domain walls by vertical spin transfer torque in La <sub>0.67</sub> Sr <sub>0.33</sub> MnO <sub>3</sub> film. Applied Physics Letters, 2018, 112, 072408.	1.5	14
34	Observation of spin-orbit magnetoresistance in metallic thin films on magnetic insulators. Science Advances, 2018, 4, eaao3318.	4.7	32
35	Anomalous spin-dependent tunneling statistics in Fe/MgO/Fe junctions induced by disorder at the interface. Physical Review B, 2018, 97, .	1.1	10
36	Effect of magnetization boundary condition on cavity magnon polariton of YIG thin film. Nanotechnology, 2018, 29, 254002.	1.3	6

#	ARTICLE	IF	CITATIONS
37	3D multilevel spin transfer torque devices. Applied Physics Letters, 2018, 112, .	1.5	15
38	Ionic liquid gating control of RKKY interaction in FeCoB/Ru/FeCoB and (Pt/Co) <sub>2</sub> /Ru/(Co/Pt) <sub>2</sub> multilayers. Nature Communications, 2018, 9, 991.	5.8	87
39	Gilbert damping in FeCo alloy: From weak to strong spin disorder. Physical Review B, 2018, 98, .	1.1	9
40	Strong Interlayer Magnon-Magnon Coupling in Magnetic Metal-Insulator Hybrid Nanostructures. Physical Review Letters, 2018, 120, 217202.	2.9	119
41	Surface roughness modulated resistivity in copper thin films. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	4
42	Synchronized spin-photon coupling in a microwave cavity. Physical Review B, 2018, 98, .	1.1	92
43	Dynamic Spin-Lattice Coupling and Nematic Fluctuations in NaFeAs. Physical Review X, 2018, 8, .	2.8	9
44	Substantial enhancement of thermal spin polarization in Py/Cu interface. Physical Review Materials, 2018, 2, .	0.9	4
45	Gilbert Damping Parameter in MgO-Based Magnetic Tunnel Junctions from First Principles. Physical Review Applied, 2017, 7, .	1.5	10
46	First-principles quantum transport method for disordered nanoelectronics: Disorder-averaged transmission, shot noise, and device-to-device variability. Physical Review B, 2017, 95, .	1.1	18
47	Direct observation of magnon-phonon coupling in yttrium iron garnet. Physical Review B, 2017, 96, .	1.1	61
48	Modulations of interlayer exchange coupling through ultrathin MgO-based magnetic tunnel junctions: First-principles study. Physical Review B, 2017, 96, .	1.1	12
49	Magnon-phonon relaxation in yttrium iron garnet from first principles. Physical Review B, 2017, 96, .	1.1	22
50	Anomalous Hall effect scaling in ferromagnetic thin films. Physical Review B, 2017, 96, .	1.1	6
51	First-principles study of exchange interactions of yttrium iron garnet. Physical Review B, 2017, 95, .	1.1	66
52	Mode-dependent damping in metallic antiferromagnets due to intersublattice spin pumping. Physical Review Materials, 2017, 1, .	0.9	34
53	Spin-Dependent Transport in Fe/GaAs(100)/Fe Vertical Spin-Valves. Scientific Reports, 2016, 6, 29845.	1.6	12
54	Influence of nonlocal damping on the field-driven domain wall motion. Physical Review B, 2016, 94, .	1.1	15

#	ARTICLE	IF	CITATIONS
55	Spin Orbit Coupling Controlled Spin Pumping and Spin Hall Magnetoresistance Effects. <i>Advanced Electronic Materials</i> , 2016, 2, 1600112.	2.6	25
56	Electric and thermal spin torque across disordered FeCo/MgO/FeCo magnetic tunnel junctions. <i>Physical Review B</i> , 2016, 93, .	1.1	6
57	Giant Room Temperature Interface Spin Hall and Inverse Spin Hall Effects. <i>Physical Review Letters</i> , 2016, 116, 196602.	2.9	181
58	Thermoelectricity and disorder of FeCo/MgO/FeCo magnetic tunnel junctions. <i>Physical Review B</i> , 2014, 90, .	1.1	18
59	Magnetic domain-wall motion twisted by nanoscale probe-induced spin transfer. <i>Physical Review B</i> , 2014, 90, .	1.1	16
60	Electric and thermo spin transfer torques in Fe/Vacuum/Fe tunnel junction. <i>Frontiers of Physics</i> , 2014, 9, 768-773.	2.4	9
61	Thermally induced dynamics in ultrathin magnetic tunnel junctions. <i>Physical Review B</i> , 2013, 88, .	1.1	15
62	Unique electrical properties of nanostructured diamond cones. <i>Chinese Physics B</i> , 2013, 22, 098107.	0.7	7
63	Shot noise in magnetic tunnel junctions from first principles. <i>Physical Review B</i> , 2012, 86, .	1.1	16
64	Thermal electric effects in Fe   GaAs   Fe tunnel junctions. <i>AIP Advances</i> , 2012, 2, .	0.6	6
65	Spin transfer torque on magnetic insulators. <i>Europhysics Letters</i> , 2011, 96, 17005.	0.7	193
66	Thermal Spin Transfer in Fe-MgO-Fe Tunnel Junctions. <i>Physical Review Letters</i> , 2011, 107, 176603.	2.9	93
67	Angular momentum transfer torques in spin valves with perpendicular magnetization. <i>Physical Review B</i> , 2011, 84, .	1.1	6
68	Influence of the surface structure and vibration mode on the resistivity of Cu films. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	9
69	Nonlinear bias dependence of spin-transfer torque from atomic first principles. <i>Physical Review B</i> , 2011, 84, .	1.1	44
70	Conduction electron scattering and spin-flipping at sputtered Al/Cu Interfaces. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	2
71	The nanofabrication and transport properties of ferromagnetic metal nanocontacts. <i>Microelectronic Engineering</i> , 2010, 87, 1603-1606.	1.1	1
72	Thermal spin-transfer torques on magnetic domain walls. <i>Solid State Communications</i> , 2010, 150, 548-551.	0.9	29

#	ARTICLE	IF	CITATIONS
73	Conduction electron scattering and spin flipping at sputtered Co/Ni interfaces. Physical Review B, 2010, 82, .	1.1	16
74	Oxygen-Vacancy-Induced Diffusive Scattering in $\text{Fe/MgO/Fe}$ Tunnel Junctions. Physical Review Letters, 2010, 105, 236801.	2.9	101
75	Spin transfer torque in the presence of Andreev reflections. Physical Review B, 2010, 81, .	1.1	6
76	Effect of inserting Ni and Co layers on the quantum well states of a thin Cu film grown on Co/Cu(001). Physical Review B, 2009, 80, .	1.1	2
77	Resistivity of thin Cu films with surface roughness. Physical Review B, 2009, 79, .	1.1	127
78	Specific resistance of Pd/Ir interfaces. Applied Physics Letters, 2009, 94, 022112.	1.5	12
79	Sensitivity of Ag/Al interface specific resistances to interfacial intermixing. Journal of Applied Physics, 2009, 105, .	1.1	4
80	Calculating scattering matrices by wave function matching. Physica Status Solidi (B): Basic Research, 2008, 245, 623-640.	0.7	46
81	An all-metallic logic gate based on current-driven domain wall motion. Nature Nanotechnology, 2008, 3, 97-100.	15.6	110
82	Spin transfer torques in the nonlocal lateral spin valve. Nanotechnology, 2008, 19, 235404.	1.3	7
83	First-principles study of spin-transfer torques in layered systems with noncollinear magnetization. Physical Review B, 2008, 77, .	1.1	69
84	Spin-Transfer Torques in Antiferromagnetic Metals from First Principles. Physical Review Letters, 2008, 100, 226602.	2.9	106
85	Disorder Scattering in Magnetic Tunnel Junctions: Theory of Nonequilibrium Vertex Correction. Physical Review Letters, 2008, 100, 166805.	2.9	106
86	Achievement of sensing single spin with the aid of Kondo resonance in quantum dot connected to ferromagnetic electrodes. Applied Physics Letters, 2008, 92, .	1.5	3
87	Domain wall scattering in the nanocontacts of ferromagnetic metals with different coercive forces. Nanotechnology, 2007, 18, 295403.	1.3	3
88	Spin dependence of interfacial reflection phase-shift at the Cu-Co interface. Physical Review B, 2007, 76, .	1.1	3
89	Time-reversal Aharonov-Casher effect in mesoscopic rings with spin-orbit interaction. Physical Review B, 2007, 76, .	1.1	19
90	Molecular Design of Negative Differential Resistance Device through Intermolecular Interaction. Journal of Physical Chemistry C, 2007, 111, 19098-19102.	1.5	54

#	ARTICLE	IF	CITATIONS
91	First Principles Modeling of Tunnel Magnetoresistance of Fe/MgO/Fe Trilayers. <i>Physical Review Letters</i> , 2006, 97, 226802.	2.9	129
92	Spin-Filter Effect in Magnetite Nanowire. <i>Nano Letters</i> , 2006, 6, 1087-1091.	4.5	108
93	Temperature-dependent resistance changes in invar alloy nanocontact. <i>Applied Physics Letters</i> , 2006, 88, 033108.	1.5	0
94	Consistency in Formulation of Spin Current and Torque Associated with a Variance of Angular Momentum. <i>Physical Review Letters</i> , 2006, 96, 066601.	2.9	47
95	Orientation-Dependent Transparency of Metallic Interfaces. <i>Physical Review Letters</i> , 2006, 96, 176602.	2.9	27
96	Transport of spin-polarized electrons in a magnetic superlattice. <i>Physical Review B</i> , 2006, 73, .	1.1	57
97	First-principles scattering matrices for spin transport. <i>Physical Review B</i> , 2006, 73, .	1.1	104
98	Spin accumulation and decay in magnetic Schottky barriers. <i>Physical Review B</i> , 2005, 72, .	1.1	17
99	Comparison of measured and calculated specific resistances of Pd/Pt interfaces. <i>Applied Physics Letters</i> , 2005, 87, 252508.	1.5	14
100	Pd/Ag and Pd/Au interface specific resistances and interfacial spin flipping. <i>Applied Physics Letters</i> , 2005, 86, 182502.	1.5	31
101	Spin-injection through an Fe/InAs interface. <i>Physica Status Solidi A</i> , 2003, 196, 25-28.	1.7	2
102	Spin injection through an Fe/InAs interface. <i>Physical Review B</i> , 2003, 67, .	1.1	63
103	Spin-Dependent Transparency of Ferromagnet/Superconductor Interfaces. <i>Physical Review Letters</i> , 2002, 89, 166603.	2.9	63
104	Scattering theory of interface resistance in magnetic multilayers. <i>Journal Physics D: Applied Physics</i> , 2002, 35, 2410-2414.	1.3	34
105	Spin torques in ferromagnetic/normal-metal structures. <i>Physical Review B</i> , 2002, 65, .	1.1	224
106	Semiclassical concepts in magnetoelectronics. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001, 84, 31-36.	1.7	11
107	Interface resistance of disordered magnetic multilayers. <i>Physical Review B</i> , 2001, 63, .	1.1	107
108	The magnetic properties of Co/Pb multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 1998, 177-181, 1211-1212.	1.0	2

#	ARTICLE	IF	CITATIONS
109	Magnetic Anisotropy and Ferromagnetic Resonance in Co/Pb Multilayers. <i>Physica Status Solidi A</i> , 1998, 165, 261-270.	1.7	3
110	A comparative study of Heisenberg-like models with and without internal spin fluctuations. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 5643-5653.	0.7	2
111	Noncollinear interlayer coupling across a semiconductor spacer. <i>Physical Review B</i> , 1997, 56, 14901-14904.	1.1	7
112	Noncollinear interlayer exchange coupling caused by interface spin-orbit interaction. <i>Physical Review B</i> , 1997, 55, 12561-12565.	1.1	27
113	Structure and interlayer coupling in Co/V multilayers. <i>Zeitschrift für Physik B-Condensed Matter</i> , 1997, 104, 387-392.	1.1	5
114	Temperature dependence of noncollinear interlayer coupling. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 230, 223-228.	0.9	1
115	A simple model of the giant magnetoresistance in doped LaMnO <sub>3</sub> perovskite. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 237, 90-94.	0.9	7
116	Magnetization and susceptibility of the two-spin Heisenberg model. <i>Solid State Communications</i> , 1997, 102, 35-40.	0.9	2