Zhe Yuan

List of Publications by Year
in descending order

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60 papers	2,738 citations	218677 26 h-index	175258 52 g-index
60 all docs	60 docs citations	60 times ranked	3834 citing authors

#	Article	IF	Citations
1	Fourfold Anisotropic Magnetoresistance of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">L</mml:mi><mml:mn>1</mml:mn></mml:mrow><mml:mrow><mml:mn>0</mml:mn></mml:mrow></mml:msub> FePt Due to Relaxation Time Anisotropy. Physical Review Letters, 2022, 128, .	7.8	16
2	Calculating the spin memory loss at Cu|metal interfaces from first principles. Physical Review B, 2022, 106, .	3.2	4
3	Inâ€Memory Mathematical Operations with Spinâ€Orbit Torque Devices. Advanced Science, 2022, 9, .	11.2	4
4	Strain-induced Anisotropic Terahertz Emission From a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Fe</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>211</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 617 Td (stretchy="false">)</mml:mo><mml:mn>110</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 597 Td (stretchy="false">)</mml:mo></mml:math>	3.8	11
5	Spin-Flip Diffusion Length in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>5</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:math> Transition Metal Elements: A First-Principles Benchmark. Physical Review Letters, 2021, 126, 196601.	7.8	10
6	Spin transport at finite temperatures: A first-principles study for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mtext>ferromagnetic</mml:mtext><mml:mo>|</mml:mo><mml:mtext>no</mml:mtext> interfaces. Physical Review B, 2021, 104, .	3.2	6
7	Spin accumulation and dissipation excited by an ultrafast laser pulse. Physical Review B, 2021, 104, .	3.2	6
8	Engineering Spiking Neurons Using Threshold Switching Devices for High-Efficient Neuromorphic Computing. Frontiers in Neuroscience, 2021, 15, 786694.	2.8	11
9	Fingerprint of the inverse Rashba-Edelstein effect at heavy-metal/Cu interfaces. Physical Review B, 2020, 102, .	3.2	12
10	Anticipative Tracking with the Short-Term Synaptic Plasticity of Spintronic Devices. Physical Review Applied, 2020, 14, .	3.8	3
11	Integrated Plasmonics: Broadband Dirac Plasmons in Borophene. Physical Review Letters, 2020, 125, 116802.	7.8	67
12	Intrinsic Mechanism for Anisotropic Magnetoresistance and Experimental Confirmation in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>Co</mml:mi></mml:mrow><mml:mrow><mml:mi>x</mml:mi> Single-Crystal Films. Physical Review Letters, 2020, 125, 097201.	7.8	38
13	Bulk Spin Torqueâ€Driven Perpendicular Magnetization Switching in L1₀ FePt Single Layer. Advanced Materials, 2020, 32, e2002607.	21.0	66
14	Disorder Dependence of Interface Spin Memory Loss. Physical Review Letters, 2020, 124, 087702.	7.8	57
15	Spintronic devices for neuromorphic computing. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	16
16	Interface reflectivity of a superdiffusive spin current in ultrafast demagnetization and terahertz emission. Physical Review B, 2020, 101, .	3.2	27
17	Recent progress in antiferromagnetic dynamics. Europhysics Letters, 2020, 132, 57001.	2.0	9
18	Recurrent neural networks made of magnetic tunnel junctions. AIP Advances, 2020, 10, .	1.3	10

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19	Role of crystalline and damping anisotropy to the angular dependences of spin rectification effect in single crystal CoFe film. New Journal of Physics, 2020, 22, 093047.	2.9	5
20	Temperature dependence of the side-jump spin Hall conductivity. Physical Review B, 2019, 100, .	3.2	8
21	Proper dissipative torques in antiferromagnetic dynamics. Europhysics Letters, 2019, 126, 67006.	2.0	23
22	Isotropic non-local Gilbert damping driven by spin pumping in epitaxial Pd/Fe films on MgO(001) substrates. New Journal of Physics, 2019, 21, 103040.	2.9	10
23	Enhancement of ultrafast demagnetization rate and Gilbert damping driven by femtosecond laser-induced spin currents in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">F</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>81</mml:mn></mml:msub><mml:mi mathvariant="normal">G</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>19	3.2	19
24	A Spinâ€“Orbitâ€Torque Memristive Device. Advanced Electronic Materials, 2019, 5, 1800782.	5.1	51
25	Noncollinearity-modulated Electronic Properties of Monolayer CrI3. Physical Review Applied, 2019, 11, .	3.8	3
26	Memristors: A Spinâ€“Orbitâ€Torque Memristive Device (Adv. Electron. Mater. 4/2019). Advanced Electronic Materials, 2019, 5, 1970022.	5.1	4
27	Calculating spin transport properties from first principles: Spin currents. Physical Review B, 2019, 99, .	3.2	25
28	Stacking tunable interlayer magnetism in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CrI</mml:mi><mml:mn>3</mml:mn></mml:msub></mml: Physical Review B, 2019, 99, .	3.2	287
29	Tuning non-Gilbert-type damping in FeGa films on MgO(001) via oblique deposition. New Journal of Physics, 2019, 21, 123001.	2.9	8
30	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>p</mml:mi></mml:mrow></mml: -insulator heterointerfaces: Creation of half-metallicity and anionogenic ferromagnetism via double exchange. Physical Review B, 2018, 97, .	3.2	2
31	3D multilevel spin transfer torque devices. Applied Physics Letters, 2018, 112, .	3.3	15
32	Reduced interfacial magnetic moment of Y3Fe5O12 by capping Pt. Applied Physics Letters, 2018, 113, 182402.	3.3	7
33	Theory of chiral effects in magnetic textures with spin-orbit coupling. Physical Review B, 2018, 98, .	3.2	7
34	Gilbert damping in FeCo alloy: From weak to strong spin disorder. Physical Review B, 2018, 98, .	3.2	9
35	Spin diffusion length and spin Hall angle in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pd</mml:mi><mml:mrow><mml:mn>1</mml: heterostructures: Examination of spin relaxation mechanism. Physical Review B, 2018, 98, .	3.2	32
36	Calculation of intrinsic spin Hall conductivity by Wannier interpolation. Physical Review B, 2018, 98, .	3.2	80

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37	Self-consistent determination of spin Hall angle and spin diffusion length in Pt and Pd: The role of the interface spin loss. Science Advances, 2018, 4, eaat1670.	10.3	157
38	Calculating the transport properties of magnetic materials from first principles including thermal and alloy disorder, noncollinearity, and spin-orbit coupling. Physical Review B, 2018, 97, .	3.2	44
39	Anisotropic spin relaxation induced by surface spin-orbit effects. Physical Review B, 2017, 96, .	3.2	7
40	Magnon-phonon relaxation in yttrium iron garnet from first principles. Physical Review B, 2017, 96, .	3.2	22
41	Mode-dependent damping in metallic antiferromagnets due to intersublattice spin pumping. Physical Review Materials, 2017, 1, .	2.4	34
42	Room-temperature spinâ€“orbit torque in NiMnSb. Nature Physics, 2016, 12, 855-860.	16.7	79
43	Influence of nonlocal damping on the field-driven domain wall motion. Physical Review B, 2016, 94, .	3.2	15
44	Spin-orbit-coupling induced torque in ballistic domain walls: Equivalence of charge-pumping and nonequilibrium magnetization formalisms. Physical Review B, 2016, 93, .	3.2	15
45	Giant Room Temperature Interface Spin Hall and Inverse Spin Hall Effects. Physical Review Letters, 2016, 116, 196602.	7.8	181
46	Direct method for calculating temperature-dependent transport properties. Physical Review B, 2015, 91, .	3.2	57
47	Gilbert Damping in Noncollinear Ferromagnets. Physical Review Letters, 2014, 113, 266603.	7.8	35
48	Interface Enhancement of Gilbert Damping from First Principles. Physical Review Letters, 2014, 113, 207202.	7.8	168
49	Spin-Orbit-Coupling-Induced Domain-Wall Resistance in Diffusive Ferromagnets. Physical Review Letters, 2012, 109, 267201.	7.8	19
50	Anisotropic low-energy plasmon excitations in doped graphene: An ab initio study. Solid State Communications, 2011, 151, 1009-1013.	1.9	41
51	Symmetry-dependent screening of surface plasmons in ultrathin supported films: The case of Al/Si(111). Physical Review B, 2011, 83, .	3.2	14
52	First-principles calculations of magnetization relaxation in pure Fe, Co, and Ni with frozen thermal lattice disorder. Physical Review B, 2011, 84, .	3.2	67
53	Semiclassical approach to plasmonâ€“electron coupling and Landau damping of surface plasmons. Journal of Chemical Physics, 2011, 134, 134702.	3.0	28
54	Thermal spin-transfer torques on magnetic domain walls. Solid State Communications, 2010, 150, 548-551.	1.9	29

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55	Linear response approach to collective electronic excitations of solids and surfaces. Computer Physics Communications, 2009, 180, 466-473.	7.5	22
56	Landau damping and lifetime oscillation of surface plasmons in metallic thin films studied in a jellium slab model. Surface Science, 2008, 602, 460-464.	1.9	54
57	End and Central Plasmon Resonances in Linear Atomic Chains. Physical Review Letters, 2007, 98, 216602.	7.8	157
58	Linear-response study of plasmon excitation in metallic thin films: Layer-dependent hybridization and dispersion. Physical Review B, 2006, 73, .	3.2	48
59	Plasmonic Properties of Supported Pt and Pd Nanostructures. Nano Letters, 2006, 6, 833-838.	9.1	444
60	Emergence of collective plasmon excitation in a confined one-dimensional electron gas. Physical Review B, 2005, 72, .	3.2	33