Zhe Yuan

List of Publications by Year
in descending order

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Version: 2024-02-01

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	Plasmonic Properties of Supported Pt and Pd Nanostructures. Nano Letters, 2006, 6, 833-838.	9.1	444
2	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
3	Giant Room Temperature Interface Spin Hall and Inverse Spin Hall Effects. Physical Review Letters, 2016, 116, 196602.	7.8	181
4	Interface Enhancement of Gilbert Damping from First Principles. Physical Review Letters, 2014, 113, 207202.	7.8	168
5	End and Central Plasmon Resonances in Linear Atomic Chains. Physical Review Letters, 2007, 98, 216602.	7.8	157
6	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
7	Calculation of intrinsic spin Hall conductivity by Wannier interpolation. Physical Review B, 2018, 98, .	3.2	80
8	Room-temperature spinâ€“orbit torque in NiMnSb. Nature Physics, 2016, 12, 855-860.	16.7	79
9	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
10	Integrated Plasmonics: Broadband Dirac Plasmons in Borophene. Physical Review Letters, 2020, 125, 116802.	7.8	67
11	Bulk Spin Torqueâ€Driven Perpendicular Magnetization Switching in L1₀ FePt Single Layer. Advanced Materials, 2020, 32, e2002607.	21.0	66
12	Direct method for calculating temperature-dependent transport properties. Physical Review B, 2015, 91, .	3.2	57
13	Disorder Dependence of Interface Spin Memory Loss. Physical Review Letters, 2020, 124, 087702.	7.8	57
14	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
15	A Spinâ€“Orbitâ€Torque Memristive Device. Advanced Electronic Materials, 2019, 5, 1800782.	5.1	51
16	Linear-response study of plasmon excitation in metallic thin films: Layer-dependent hybridization and dispersion. Physical Review B, 2006, 73, .	3.2	48
17	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
18	Anisotropic low-energy plasmon excitations in doped graphene: An ab initio study. Solid State Communications, 2011, 151, 1009-1013.	1.9	41

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19	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
20	Gilbert Damping in Noncollinear Ferromagnets. Physical Review Letters, 2014, 113, 266603.	7.8	35
21	Mode-dependent damping in metallic antiferromagnets due to intersublattice spin pumping. Physical Review Materials, 2017, 1, .	2.4	34
22	Emergence of collective plasmon excitation in a confined one-dimensional electron gas. Physical Review B, 2005, 72, .	3.2	33
23	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:mn> heterostructures: Examination of spin relaxation mechanism. Physical Review B, 2018, 98, .	3.2	32
24	Thermal spin-transfer torques on magnetic domain walls. Solid State Communications, 2010, 150, 548-551.	1.9	29
25	Semiclassical approach to plasmonâ€“electron coupling and Landau damping of surface plasmons. Journal of Chemical Physics, 2011, 134, 134702.	3.0	28
26	Interface reflectivity of a superdiffusive spin current in ultrafast demagnetization and terahertz emission. Physical Review B, 2020, 101, .	3.2	27
27	Calculating spin transport properties from first principles: Spin currents. Physical Review B, 2019, 99, .	3.2	25
28	Proper dissipative torques in antiferromagnetic dynamics. Europhysics Letters, 2019, 126, 67006.	2.0	23
29	Linear response approach to collective electronic excitations of solids and surfaces. Computer Physics Communications, 2009, 180, 466-473.	7.5	22
30	Magnon-phonon relaxation in yttrium iron garnet from first principles. Physical Review B, 2017, 96, .	3.2	22
31	Spin-Orbit-Coupling-Induced Domain-Wall Resistance in Diffusive Ferromagnets. Physical Review Letters, 2012, 109, 267201.	7.8	19
32	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
33	Spintronic devices for neuromorphic computing. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	16
34	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
35	Influence of nonlocal damping on the field-driven domain wall motion. Physical Review B, 2016, 94, .	3.2	15
36	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

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37	3D multilevel spin transfer torque devices. Applied Physics Letters, 2018, 112, .	3.3	15
38	Symmetry-dependent screening of surface plasmons in ultrathin supported films: The case of Al/Si(111). Physical Review B, 2011, 83, .	3.2	14
39	Fingerprint of the inverse Rashba-Edelstein effect at heavy-metal/Cu interfaces. Physical Review B, 2020, 102, .	3.2	12
40	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:	3.8	11
41	Engineering Spiking Neurons Using Threshold Switching Devices for High-Efficient Neuromorphic Computing. Frontiers in Neuroscience, 2021, 15, 786694.	2.8	11
42	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
43	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
44	Recurrent neural networks made of magnetic tunnel junctions. AIP Advances, 2020, 10, .	1.3	10
45	Gilbert damping in FeCo alloy: From weak to strong spin disorder. Physical Review B, 2018, 98, .	3.2	9
46	Recent progress in antiferromagnetic dynamics. Europhysics Letters, 2020, 132, 57001.	2.0	9
47	Temperature dependence of the side-jump spin Hall conductivity. Physical Review B, 2019, 100, .	3.2	8
48	Tuning non-Gilbert-type damping in FeGa films on MgO(001) via oblique deposition. New Journal of Physics, 2019, 21, 123001.	2.9	8
49	Anisotropic spin relaxation induced by surface spin-orbit effects. Physical Review B, 2017, 96, .	3.2	7
50	Reduced interfacial magnetic moment of Y3Fe5O12 by capping Pt. Applied Physics Letters, 2018, 113, 182402.	3.3	7
51	Theory of chiral effects in magnetic textures with spin-orbit coupling. Physical Review B, 2018, 98, .	3.2	7
52	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><mml:mo>|</mml:mo><mml:mtext>ne interfaces. Physical Review B, 2021, 104, .	3.2	6
53	Spin accumulation and dissipation excited by an ultrafast laser pulse. Physical Review B, 2021, 104, .	3.2	6
54	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

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55	Memristors: A Spinâ€“Orbitâ€Torque Memristive Device (Adv. Electron. Mater. 4/2019). Advanced Electronic Materials, 2019, 5, 1970022.	5.1	4
56	Calculating the spin memory loss at Cu | metal interfaces from first principles. Physical Review B, 2022, 106, .	3.2	4
57	Inâ€Memory Mathematical Operations with Spinâ€Orbit Torque Devices. Advanced Science, 2022, 9, .	11.2	4
58	Noncollinearity-modulated Electronic Properties of Monolayer CrI3. Physical Review Applied, 2019, 11, .	3.8	3
59	Anticipative Tracking with the Short-Term Synaptic Plasticity of Spintronic Devices. Physical Review Applied, 2020, 14, .	3.8	3
60	<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:r -insulator heterointerfaces: Creation of half-metallicity and anionogenic ferromagnetism via double exchange. Physical Review B, 2018, 97, .	3.2	2