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List of Publications by Year in descending order

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104
papers

14,913
citations

76031

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108
all docs

108
docs citations

108
times ranked

12857
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge density wave activated excitons in TiSe ₂ /MoSe ₂ heterostructures. APL Materials, 2022, 10, .	2.2	6
2	Spin-orbit coupling proximity effect in MoS ₂ /Fe ₃ GeTe ₂ heterostructures. Applied Physics Letters, 2022, 120, .	1.5	11
3	Fusion of Majorana bound states with mini-gate control in two-dimensional systems. Nature Communications, 2022, 13, 1738.	5.8	22
4	Intensity equations for birefringent spin lasers. Physical Review B, 2021, 103, .	1.1	7
5	Cubic spin-orbit coupling and anomalous Josephson effect in planar junctions. Physical Review B, 2021, 103, .	1.1	54
6	Synthesis, Magnetic Properties, and Electronic Structure of Magnetic Topological Insulator MnBi ₂ Se ₄ . Nano Letters, 2021, 21, 5083-5090.	4.5	28
7	Water-Dispersible CsPbBr ₃ Perovskite Nanocrystals with Ultra-Stability and its Application in Electrochemical CO ₂ Reduction. Nano-Micro Letters, 2021, 13, 172.	14.4	20
8	Quantum Spin-Valley Hall Kink States: From Concept to Materials Design. Physical Review Letters, 2021, 127, 116402.	2.9	25
9	Phase Signature of Topological Transition in Josephson Junctions. Physical Review Letters, 2021, 126, 036802.	2.9	65
10	Large Tunneling Magnetoresistance in van der Waals Ferromagnet/Semiconductor Heterojunctions. Advanced Materials, 2021, 33, e2104658.	11.1	61
11	Threshold behavior in spin lasers: Spontaneous emission and nonlinear gain. Applied Physics Letters, 2021, 119, 171104.	1.5	4
12	Evidence for anisotropic spin-triplet Andreev reflection at the 2D van der Waals ferromagnet/superconductor interface. Nature Communications, 2021, 12, 6725.	5.8	15
13	Optically Probing Tunable Band Topology in Atomic Monolayers. Physical Review Letters, 2020, 125, 157402.	2.9	21
14	Resonant tunneling anisotropic magnetoresistance induced by magnetic proximity. Physical Review B, 2020, 102, .	1.1	4
15	Superconducting Proximity Effect in InAsSb Surface Quantum Wells with In Situ Al Contacts. ACS Applied Electronic Materials, 2020, 2, 2351-2356.	2.0	22
16	Localized Excitons in NbSe ₂ -MoSe ₂ Heterostructures. ACS Nano, 2020, 14, 8528-8538.	7.3	26
17	Interfacial Spin-Orbit Coupling: A Platform for Superconducting Spintronics. Physical Review Applied, 2020, 13, .	1.5	32
18	Enhanced spin-triplet pairing in magnetic junctions with s -wave superconductors. Physical Review B, 2020, 101, .	1.1	17

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19	Phase Control of Majorana Bound States in a Topological $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi mathvariant="sans-serif"} \rangle X \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Junction. Physical Review Letters, 2020, 124, 137001.	2.9	29
20	Spin-lasers: spintronics beyond magnetoresistance. Solid State Communications, 2020, 316-317, 113949.	0.9	30
21	Proximity-induced magnetization in graphene: Towards efficient spin gating. Physical Review Materials, 2020, 4, .	0.9	2
22	Proximitized materials. Materials Today, 2019, 22, 85-107.	8.3	206
23	Optical Control of Hole Wavefunction in Type-II Magnetic Quantum Dot Structures. Journal of Physical Chemistry C, 2019, 123, 25934-25940.	1.5	3
24	Electrical Control of Majorana Bound States Using Magnetic Stripes. Physical Review Applied, 2019, 12, .	1.5	32
25	Probing many-body interactions in monolayer transition-metal dichalcogenides. Physical Review B, 2019, 99, .	1.1	56
26	Nanoelectronics with proximitized materials. Solid-State Electronics, 2019, 155, 93-98.	0.8	1
27	Ultrafast spin-lasers. Nature, 2019, 568, 212-215.	13.7	134
28	Tunable magnetic textures in spin valves: From spintronics to Majorana bound states. Physical Review B, 2019, 99, .	1.1	41
29	Dynamical screening in monolayer transition-metal dichalcogenides and its manifestations in the exciton spectrum. Journal of Physics Condensed Matter, 2019, 31, 203001.	0.7	38
30	Tailoring magnetism in semiconductors. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	12
31	Spin inversion in graphene spin valves by gate-tunable magnetic proximity effect at one-dimensional contacts. Nature Communications, 2018, 9, 2869.	5.8	65
32	Probing tunneling spin injection into graphene via bias dependence. Physical Review B, 2018, 98, .	1.1	9
33	Giant spin-valley polarization and multiple Hall effect in functionalized bismuth monolayers. Npj Quantum Materials, 2018, 3, .	1.8	44
34	Wurtzite spin lasers. Physical Review B, 2017, 95, .	1.1	21
35	Magnetic Proximity Effects in Transition-Metal Dichalcogenides: Converting Excitons. Physical Review Letters, 2017, 119, 127403.	2.9	111
36	Marrying Excitons and Plasmons in Monolayer Transition-Metal Dichalcogenides. Physical Review X, 2017, 7, .	2.8	41

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37	Tunable magnetic textures: From Majorana bound states to braiding. Solid State Communications, 2017, 262, 1-6.	0.9	37
38	Excitonic Stark effect in MoS_2 . Physical Review B, 2016, 94, .	1.1	48
39	Wireless Majorana Bound States: From Magnetic Tunability to Braiding. Physical Review Letters, 2016, 117, 077002.	2.9	59
40	Experimental Demonstration of xor Operation in Graphene Magnetologic Gates at Room Temperature. Physical Review Applied, 2016, 5, .	1.5	58
41	Effective gating and tunable magnetic proximity effects in two-dimensional heterostructures. Physical Review B, 2016, 93, .	1.1	85
42	Tunneling Planar Hall Effect in Topological Insulators: Spin Valves and Amplifiers. Physical Review Letters, 2016, 117, 166806.	2.9	33
43	Cause a stir. Nature Physics, 2016, 12, 24-25.	6.5	9
44	Probing topological transitions in HgTe/CdTe quantum wells by magneto-optical measurements. Physical Review B, 2015, 91, .	1.1	18
45	Toward high-frequency operation of spin lasers. Physical Review B, 2015, 92, .	1.1	45
46	Magnetic ordering in quantum dots: Open versus closed shells. Physical Review B, 2015, 92, .	1.1	5
47	Digital operation and eye diagrams in spin-lasers. Applied Physics Letters, 2015, 107, .	1.5	20
48	Magnetoanisotropic Andreev Reflection in Ferromagnet-Superconductor Junctions. Physical Review Letters, 2015, 115, 116601.	2.9	46
49	Roadmap for Emerging Materials for Spintronic Device Applications. IEEE Transactions on Magnetics, 2015, 51, 1-11.	1.2	179
50	Nodal ground states and orbital textures in semiconductor quantum dots. Physical Review B, 2014, 89, .	1.1	6
51	Spin polarization of Co(0001)/graphene junctions from first principles. Journal of Physics Condensed Matter, 2014, 26, 104204.	0.7	15
52	Graphene spintronics: Spin injection and proximity effects from first principles. Physical Review B, 2014, 90, .	1.1	43
53	Spin-lasers: From threshold reduction to large-signal analysis. Applied Physics Letters, 2014, 105, .	1.5	37
54	Taken for a spin. Nature Nanotechnology, 2014, 9, 750-752.	15.6	14

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55	Magneto-optical conductivity of graphene on polar substrates. Physical Review B, 2013, 88, .	1.1	43
56	Spin-orbit coupled particle in a spin bath. Physical Review B, 2013, 87, .	1.1	5
57	Theory of thermal spin-charge coupling in electronic systems. Physical Review B, 2012, 85, .	1.1	33
58	Reentrant formation of magnetic polarons in quantum dots. Physical Review B, 2012, 86, .	1.1	8
59	Mapping between quantum dot and quantum well lasers: From conventional to spin lasers. Physical Review B, 2012, 85, .	1.1	55
60	Spin ordering in magnetic quantum dots: From core-halo to Wigner molecules. Physical Review B, 2012, 86, .	1.1	11
61	New moves of the spintronics tango. Nature Materials, 2012, 11, 368-371.	13.3	249
62	Nanospintronics Based on Magnetologic Gates. IEEE Transactions on Electron Devices, 2012, 59, 259-262.	1.6	141
63	Tailoring chirp in spin-lasers. Applied Physics Letters, 2012, 100, .	1.5	27
64	Magnetic anisotropies of quantum dots doped with magnetic ions. Physical Review B, 2012, 85, .	1.1	14
65	Spin Twists in a Transistor. Science, 2012, 337, 307-308.	6.0	5
66	Magnetism in Closed-Shell Quantum Dots: Emergence of Magnetic Bipolarons. Physical Review Letters, 2011, 106, 177201.	2.9	26
67	Semiconductor Spin-Lasers. , 2011, , 731-745.		3
68	Taming spin currents. Nature Materials, 2011, 10, 647-648.	13.3	68
69	Chameleon Magnets. Science, 2011, 332, 1040-1041.	6.0	6
70	Reconfigurable nanoelectronics using graphene based spintronic logic gates. Proceedings of SPIE, 2011, , .	0.8	6
71	Theory of quantum dot spin lasers. Physical Review B, 2010, 82, .	1.1	18
72	Spin modulation in semiconductor lasers. Applied Physics Letters, 2010, 97, .	1.5	67

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73	Superconducting proximity effects in metals with a repulsive pairing interaction. Physical Review B, 2010, 82, .	1.1	14
74	Shedding light on nanomagnets. Nature Nanotechnology, 2009, 4, 623-625.	15.6	13
75	Spins take sides. Nature Physics, 2009, 5, 630-632.	6.5	3
76	Analytical model of spin-polarized semiconductor lasers. Applied Physics Letters, 2008, 93, .	1.5	63
77	Optical orientation in bipolar spintronic devices. Semiconductor Science and Technology, 2008, 23, 114005.	1.0	4
78	Piezomagnetic Quantum Dots. Physical Review Letters, 2008, 101, 207202.	2.9	42
79	Bipolar spintronics: from spin injection to spin-controlled logic. Journal of Physics Condensed Matter, 2007, 19, 165219.	0.7	18
80	Tailoring Magnetism in Quantum Dots. Physical Review Letters, 2007, 98, 207203.	2.9	62
81	Semiconductor spintronics. Acta Physica Slovaca, 2007, 57, .	1.4	642
82	Silicon twists. Nature, 2007, 447, 269-270.	13.7	43
83	Thermodynamics of Carrier-Mediated Magnetism in Semiconductors. Physical Review Letters, 2007, 99, 257202.	2.9	30
84	Spin Injection and Detection in Silicon. Physical Review Letters, 2006, 97, 026602.	2.9	131
85	Determination of Interface Atomic Structure and Its Impact on Spin Transport Using Z-Contrast Microscopy and Density-Functional Theory. Physical Review Letters, 2006, 96, 196101.	2.9	78
86	A path to spin logic. Nature Physics, 2005, 1, 85-86.	6.5	35
87	Temperature-Dependent Asymmetry of the Nonlocal Spin-Injection Resistance: Evidence for Spin Nonconserving Interface Scattering. Physical Review Letters, 2005, 94, 176601.	2.9	118
88	Phase-Sensitive Tests of the Pairing State Symmetry in Sr ₂ RuO ₄ . Physical Review Letters, 2005, 95, 217004.	2.9	65
89	Magnetic bipolar transistor. Applied Physics Letters, 2004, 84, 85-87.	1.5	121
90	Spintronics: Fundamentals and applications. Reviews of Modern Physics, 2004, 76, 323-410.	16.4	9,479

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91	Proposal for all-electrical measurement of T1 in semiconductors. Applied Physics Letters, 2003, 82, 221-223.	1.5	34
92	Spin-Polarized Transport in Inhomogeneous Magnetic Semiconductors: Theory of Magnetic/Nonmagnetic p-n Junctions. Physical Review Letters, 2002, 88, 066603.	2.9	207
93	Novel Aspects of Spin-Polarized Transport and Spin Dynamics. Journal of Superconductivity and Novel Magnetism, 2002, 15, 5-12.	0.5	17
94	Proposal for a spin-polarized solar battery. Applied Physics Letters, 2001, 79, 1558-1560.	1.5	76
95	Spin injection through the depletion layer: A theory of spin-polarized p-n junctions and solar cells. Physical Review B, 2001, 64, .	1.1	101
96	Midgap edge states and pairing symmetry of quasi-one-dimensional organic superconductors. Physical Review B, 2001, 63, .	1.1	262
97	Reanalysis of the magnetic field dependence of the penetration depth: Observation of the nonlinear Meissner effect. Physical Review B, 2001, 63, .	1.1	13
98	Spintronics: electron spin coherence, entanglement, and transport. Superlattices and Microstructures, 2000, 27, 289-295.	1.4	49
99	Angular dependence of the penetration depth in unconventional superconductors. Physical Review B, 2000, 63, .	1.1	3
100	Tunneling spectroscopy for ferromagnet/superconductor junctions. Physical Review B, 2000, 61, 1555-1566.	1.1	161
101	Spin-polarized transport and Andreev reflection in semiconductor/superconductor hybrid structures. Physical Review B, 1999, 60, R16322-R16325.	1.1	71
102	Angular Dependence of the Nonlinear Transverse Magnetic Moment of YBa2Cu3O6.95 in the Meissner State. Physical Review Letters, 1999, 82, 3132-3135.	2.9	56
103	Low-frequency nonlinear magnetic response of an unconventional superconductor. Physical Review B, 1998, 58, 8738-8748.	1.1	20
104	Superconducting-gap-node spectroscopy using nonlinear electrodynamics. Physical Review B, 1997, 56, 11279-11293.	1.1	23