Jason Robinson

List of Publications by Year
in descending order

84 papers	3,668 citations	186265 28 h-index	128289 60 g-index
85 all docs	85 docs citations	85 times ranked	2849 citing authors

#	Article	IF	Citations
1	Superconducting spintronics. Nature Physics, 2015, 11, 307-315.	16.7	826
2	Controlled Injection of Spin-Triplet Supercurrents into a Strong Ferromagnet. Science, 2010, 329, 59-61.	12.6	457
3	Critical Current Oscillations in Strong FerromagneticÏ€Junctions. Physical Review Letters, 2006, 97, 177003.	7.8	201
4	Signature of magnetic-dependent gapless odd frequency states at superconductor/ferromagnet interfaces. Nature Communications, 2015, 6, 8053.	12.8	113
5	Tm₃Fe₅O₁₂/Pt Heterostructures with Perpendicular Magnetic Anisotropy for Spintronic Applications. Advanced Electronic Materials, 2017, 3, 1600376.	5.1	112
6	Enhanced spin pumping into superconductors provides evidence for superconducting pure spin currents. Nature Materials, 2018, 17, 499-503.	27.5	107
7	The interface between superconductivity and magnetism: understanding and device prospects. Journal of Physics Condensed Matter, 2014, 26, 453201.	1.8	101
8	Zero to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï€</mml:mi></mml:math>transition in superconductor-ferromagnet-superconductor junctions. Physical Review B, 2007, 76, .	3.2	99
9	Giant triplet proximity effect in superconducting pseudo spin valves with engineered anisotropy. Physical Review B, 2014, 89, .	3.2	84
10	p-wave triggered superconductivity in single-layer graphene on an electron-doped oxide superconductor. Nature Communications, 2017, 8, 14024.	12.8	79
11	Evidence for spin selectivity of triplet pairs in superconducting spin valves. Nature Communications, 2014, 5, 3048.	12.8	74
12	Reversible control of spin-polarized supercurrents in ferromagnetic Josephson junctions. Nature Communications, 2014, 5, 4771.	12.8	73
13	Pure second harmonic current-phase relation in spin-filter Josephson junctions. Nature Communications, 2014, 5, 3340.	12.8	60
14	Evidence for anisotropic triplet superconductor order parameter in half-metallic ferromagnetic La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.7</mml:mn></mml:mrow></mml:msub></mml:math>Ca<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.3</mml:mn></mml:mrow></mml:msub></mml:math>Mn<mml:math xmlns:mm	3.2	54
15	Inverse proximity effect at superconductor-ferromagnet interfaces: Evidence for induced triplet pairing in the superconductor. Physical Review B, 2015, 92, .	3.2	54
16	Two-channel anomalous Hall effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Materials, 2020, 4, .	2.4	53
17	Radio-Frequency Capacitive Gate-Based Sensing. Physical Review Applied, 2018, 10, .	3.8	50
18	Supercurrent enhancement in Bloch domain walls. Scientific Reports, 2012, 2, 699.	3.3	46

#	Article	IF	Citations
19	Effect of Meissner Screening and Trapped Magnetic Flux on Magnetization Dynamics in Thick <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Nb</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi>Ni</mml:mi><mml:mn>80</mml:mn></mml:msub></mml:mrow><mml:mo>/</mml:mo><mml:mi>Nb</mml:mi></mml:math> Trilayers. Physical Review Applied, 2019, 11, .	3.8	44
20	Large Superconducting Spin Valve Effect and Ultrasmall Exchange Splitting in Epitaxial Rare-Earth-Niobium Trilayers. Physical Review Letters, 2015, 115, 067201.	7.8	42
21	Fast Gate-Based Readout of Silicon Quantum Dots Using Josephson Parametric Amplification. Physical Review Letters, 2020, 124, 067701.	7.8	42
22	Magnetic-coupling-dependent spin-triplet supercurrents in helimagnet/ferromagnet Josephson junctions. Physical Review B, 2011, 84, .	3.2	41
23	Spin-Pumping-Induced Inverse Spin Hall Effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Nb</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi>Ni</mml:mi><mml:mn>80</mml:mn></mml:msub></mml:mrow><mml:mo>/</mml:mo><mml:mi>Nb</mml:mi></mml:math> Bilayers and its Strong Decay Across the Superconducting Transition Temperature. Physical Review Applied, 2018, 10, .	3.8	38
24	Magnetic field dependence of the proximity-induced triplet superconductivity at ferromagnet/superconductor interfaces. Physical Review B, 2014, 89, .	3.2	36
25	Synthetic Antiferromagnetic Coupling Between Ultrathin Insulating Garnets. Physical Review Applied, 2018, 10, .	3.8	34
26	Low-impedance superconducting microwave resonators for strong coupling to small magnetic mode volumes. Physical Review B, 2019, 99, .	3.2	32
27	Challenges in identifying chiral spin textures via the topological Hall effect. Communications Materials, 2022, 3, .	6.9	32
28	3D strain-induced superconductivity in La ₂ CuO _{4+Î´} using a simple vertically aligned nanocomposite approach. Science Advances, 2019, 5, eaav5532.	10.3	31
29	Exchange-field enhancement of superconducting spin pumping. Physical Review B, 2019, 99, .	3.2	31
30	Spin transport parameters of NbN thin films characterized by spin pumping experiments. Physical Review Materials, 2019, 3, .	2.4	30
31	Niobium diselenide superconducting photodetectors. Applied Physics Letters, 2019, 114, .	3.3	28
32	Abrikosov vortex nucleation and its detrimental effect on superconducting spin pumping in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">Pt</mml:mi><mml:mo>/</mml:mo><mml:mi mathvariant="normal">Nb</mml:mi><mml:mo>/</mml:mo><mml:mi mathvariant="normal">Ni</mml:mi></mml:mrow><mml:mn>80</mml:mn></mml:msub><mml:msub><mml:mi	3.2	25
33	Large Dispersive Interaction between a CMOS Double Quantum Dot and Microwave Photons. PRX Quantum, 2021, 2, .	9.2	25
34	Magnetic coupling at rare earth ferromagnet/transition metal ferromagnet interfaces: A comprehensive study of Gd/Ni. Scientific Reports, 2016, 6, 30092.	3.3	24
35	Spin-transport in superconductors. Applied Physics Letters, 2020, 116, .	3.3	23
36	Boosting spintronics with superconductivity. APL Materials, 2021, 9, .	5.1	23

#	Article	IF	Citations
37	Triplet pair correlations and nonmonotonic supercurrent decay with Cr thickness in Nb/Cr/Fe/Nb Josephson devices. Physical Review B, 2014, 89, .	3.2	22
38	Magnetic state controllable critical temperature in epitaxial Ho/Nb bilayers. APL Materials, 2014, 2, .	5.1	21
39	Strong odd-frequency correlations in fully gapped Zeeman-split superconductors. Scientific Reports, 2015, 5, 15483.	3.3	21
40	Enhanced localized superconductivity in Sr₂RuO₄thin film by pulsed laser deposition. Superconductor Science and Technology, 2016, 29, 095005.	3.5	19
41	Electric control of superconducting transition through a spin-orbit coupled interface. Scientific Reports, 2016, 6, 29312.	3.3	18
42	Out of plane superconducting Nb/Cu/Ni/Cu/Co triplet spin-valves. Applied Physics Letters, 2017, 111, .	3.3	17
43	Nodal superconducting exchange coupling. Nature Materials, 2019, 18, 1194-1200.	27.5	17
44	Tunable Pure Spin Supercurrents and the Demonstration of Their Gateability in a Spin-Wave Device. Physical Review X, 2020, 10, .	8.9	17
45	Field modulation of the critical current in magnetic Josephson junctions. Superconductor Science and Technology, 2013, 26, 055017.	3.5	16
46	Spin Quintet in a Silicon Double Quantum Dot: Spin Blockade and Relaxation. Physical Review X, 2020, 10, .	8.9	15
47	Chirality-controlled spontaneous currents in spin-orbit coupled superconducting rings. Physical Review B, 2019, 99, .	3.2	14
48	Spin-orbit coupling suppression and singlet-state blocking of spin-triplet Cooper pairs. Science Advances, 2021, 7, .	10.3	14
49	Photonic Sorting of Aligned, Crystalline Carbon Nanotube Textiles. Scientific Reports, 2017, 7, 12977.	3.3	13
50	Nanoscale Domain Wall Engineered Spin-Triplet Josephson Junctions and SQUID. Nano Letters, 2021, 21, 3092-3097.	9.1	13
51	Superconducting Sr₂RuO₄ Thin Films without Out-of-Phase Boundaries by Higher-Order Ruddlesdenâ€“Popper Intergrowth. Nano Letters, 2021, 21, 4185-4192.	9.1	13
52	Fraunhofer patterns in magnetic Josephson junctions with non-uniform magnetic susceptibility. Scientific Reports, 2019, 9, 5616.	3.3	12
53	Strain, spin disorder, and thickness dependence of magneto-transport in Sm_{0.55}Sr_{0.45}MnO₃ films. Applied Physics Letters, 2012, 100, 252408.	3.3	11
54	Magnetic Exchange Fields and Domain Wall Superconductivity at an All-Oxide Superconductor-Ferromagnet Insulator Interface. Physical Review Letters, 2018, 121, 077003.	7.8	11

#	Article	IF	Citations
55	Topological valley currents via ballistic edge modes in graphene superlattices near the primary Dirac point. Communications Physics, 2020, 3, .	5.3	11
56	Temperature dependence of the picosecond spin Seebeck effect. Applied Physics Letters, 2021, 119, .	3.3	11
57	Unveiling unconventional magnetism at the surface of Sr2RuO4. Nature Communications, 2021, 12, 5792.	12.8	11
58	Long-range triplet proximity effect in multiply connected ferromagnet-superconductor hybrids. Physical Review B, 2019, 100, .	3.2	9
59	Superconducting vortices generated via spin-orbit coupling at superconductor/ferromagnet interfaces. Physical Review B, 2019, 100, .	3.2	9
60	Magnetotransport and magnetic properties of amorphous $$mathrm{NdNi}_5$$ thin films. Scientific Reports, 2020, 10, 13693.	3.3	9
61	Observation of superconducting gap spectra of long-range proximity effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Au</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi> tunnel junctions. Physical Review B, 2019, 100, .	3.2	8
62	Transition between canted antiferromagnetic and spin-polarized ferromagnetic quantum Hall states in graphene on a ferrimagnetic insulator. Physical Review B, 2020, 101, .	3.2	8
63	Estimating the spin diffusion length of semiconducting Indium Tin Oxide using Co/Indium Tin Oxide/Co spin valve junctions. Applied Physics Letters, 2010, 96, .	3.3	7
64	Structural properties of thin-film ferromagnetic topological insulators. Scientific Reports, 2017, 7, 12061.	3.3	7
65	Controlling spin supercurrents via nonequilibrium spin injection. Scientific Reports, 2019, 9, 12731.	3.3	7
66	Parametric Amplifiers Based on Quantum Dots. Physical Review Letters, 2022, 128, .	7.8	7
67	Thickness dependence and the role of spin transfer torque in nonlinear giant magnetoresistance of permalloy dual spin valves. Physical Review B, 2010, 82, .	3.2	6
68	Pair suppression caused by mosaic-twist defects in superconducting Sr2RuO4 thin-films prepared using pulsed laser deposition. Communications Materials, 2020, 1, .	6.9	6
69	Andreev bound states in superconductor/ferromagnet point contact Andreev reflection spectra. Physical Review B, 2017, 95, .	3.2	5
70	Highly Bi-doped Cu thin films with large spin-mixing conductance. APL Materials, 2018, 6, .	5.1	5
71	Pure Spin Currents Driven by Colossal Spinâ€“Orbit Coupling on Two-Dimensional Surface Conducting SrTiO₃. Nano Letters, 2021, 21, 6511-6517.	9.1	5
72	Tunable critical field in Rashba superconductor thin films. Physical Review B, 2021, 103, .	3.2	5

#	Article	IF	Citations
73	Crossover Induced by Spin-Density-Wave Interference in the Coherence of Singlet Electron Pairs in Cr. Physical Review Letters, 2009, 103, 207002.	7.8	4
74	Universal proximity effects in hybrid superconductorâ€“linker moleculeâ€“nanoparticle systems: The effect of molecular chirality. Applied Physics Letters, 2020, 117, .	3.3	4
75	Growth, strain, and spin-orbit torques in epitaxial Ni-Mn-Sb films sputtered on GaAs. Physical Review Materials, 2021, 5, .	2.4	3
76	Controllable Enhancement of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math> -Wave Superconductivity via Magnetic Coupling to a Conventional Superconductor. Physical Review Letters, 2021, 127, 267001.	7.8	3
77	Band-structure-dependent nonlinear giant magnetoresistance in Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math> dual spin valves. Physical Review B, 2012, 86, .	3.2	2
78	Anomalous anisotropic behaviour of spin-triplet proximity effect in Au/SrRuO3/Sr2RuO4 junctions. Scientific Reports, 2019, 9, 15827.	3.3	2
79	Magnetic field tunable superconducting transition in Nb/Co/Py/Nb exchange spring multilayers. Applied Physics Letters, 2020, 116, 112601.	3.3	2
80	A Review of Electronic Transport in Superconducting Sr2RuO4 Junctions. Coatings, 2021, 11, 1110.	2.6	2
81	Terahertz Time-Domain Spectroscopy. , 2020, 1, 1-4.		1
82	Enhancement of Josephson Critical Currents in Ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Co</mml:mi><mml:mn>40</mml:mn></mml:msub></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>40</mml:mn></mml:msub></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><m	3.8	1
83	Superconductivity in Ti67Zr19Nb11.5Sn2.5 shape memory alloy. Physical Review Materials, 2021, 5, .	2.4	0
84	Role of disorder in the superconducting proximity effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>a</mml:mi><mml:mtext>â^’</mml:mtext><mml:msub><mml:mi>NdNi</mml:mi> bilayers. Physical Review B, 2021, 104, .	3.2	0