

Robert C Dyne

List of Publications by Year in descending order

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53
papers

5,234
citations

279798

23
h-index

189892

50
g-index

53
all docs

53
docs citations

53
times ranked

3105
citing authors

#	ARTICLE	IF	CITATIONS
1	Neuromorphic computing: Challenges from quantum materials to emergent connectivity. Applied Physics Letters, 2022, 120, .	3.3	9
2	Superconducting disordered neural networks for neuromorphic processing with fluxons. Science Advances, 2022, 8, eabn4485.	10.3	7
3	Oxide superconductorsâ€”light on a continuing mystery. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2024422118.	7.1	0
4	<i>Operando</i> characterization of conductive filaments during resistive switching in Mott VO₂. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
5	Superconducting neural networks with disordered Josephson junction array synaptic networks and leaky integrate-and-fire loop neurons. Journal of Applied Physics, 2021, 129, .	2.5	21
6	Low-temperature emergent neuromorphic networks with correlated oxide devices. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
7	Inherent stochasticity during insulatorâ€”metal transition in VO₂. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
8	Restingâ€”state magnetoencephalography source magnitude imaging with deepâ€”learning neural network for classification of symptomatic combatâ€”related mild traumatic brain injury. Human Brain Mapping, 2021, 42, 1987-2004.	3.6	5
9	Micrometer Scale Yâ€”Baâ€”Cuâ€”O SQUID Arrays Fabricated With a Focused Helium Ion Beam. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-3.	1.7	2
10	Direct-coupled micro-magnetometer with Y-Ba-Cu-O nano-slit SQUID fabricated with a focused helium ion beam. Applied Physics Letters, 2018, 113, 162602.	3.3	33
11	Superconducting Nano Wire Circuits Fabricated using a Focused Helium Beam. Microscopy and Microanalysis, 2015, 21, 1997-1998.	0.4	1
12	Application of Focused Helium Ion Beams for Direct-write Lithography of Superconducting Electronics. Microscopy and Microanalysis, 2015, 21, 2321-2322.	0.4	0
13	Nano Josephson superconducting tunnel junctions in YBa ₂ Cu ₃ O ₇ â€” directly patterned with a focused helium ion beam. Nature Nanotechnology, 2015, 10, 598-602.	31.5	146
14	Large scale two-dimensional arrays of magnesium diboride superconducting quantum interference devices. Applied Physics Letters, 2014, 104, 182604.	3.3	9
15	Large voltage modulation in magnetic field sensors from two-dimensional arrays of Y-Ba-Cu-O nano Josephson junctions. Applied Physics Letters, 2014, 104, .	3.3	31
16	Comparison of Yâ€”Baâ€”Cuâ€”O Films Irradiated With Helium and Neon Ions for the Fabrication of Josephson Devices. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	10
17	Fabrication of Arrays of Nano-Superconducting Quantum Interference Devices Using a Double-Angle Processing Approach. IEEE Transactions on Applied Superconductivity, 2013, 23, 1100604-1100604.	1.7	1
18	Nanometer scale high-aspect-ratio trench etching at controllable angles using ballistic reactive ion etching. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 010604.	1.2	9

#	ARTICLE	IF	CITATIONS
19	Comparison of measurements and simulations of series-parallel incommensurate area superconducting quantum interference device arrays fabricated from YBa ₂ Cu ₃ O _{7-δ} ion damage Josephson junctions. Journal of Applied Physics, 2012, 112, .	2.5	28
20	LOCALIZATION AND THE METAL-INSULATOR TRANSITION EXPERIMENTAL OBSERVATIONS. International Journal of Modern Physics B, 2010, 24, 2072-2089.	2.0	3
21	Josephson scanning tunneling microscopy: A local and direct probe of the superconducting order parameter. Physical Review B, 2009, 80, .	3.2	23
22	Very Large Scale Integration of Nanopatterned YBa ₂ Cu ₃ O _{7-δ} Josephson Junctions in a Two-Dimensional Array. Nano Letters, 2009, 9, 3581-3585.	9.1	48
23	Series array of incommensurate superconducting quantum interference devices from YBa ₂ Cu ₃ O _{7-δ} ion damage Josephson junctions. Applied Physics Letters, 2008, 93, 182502.	3.3	37
24	Scanning Josephson Tunneling Microscopy of Single-Crystal $\text{Sr}_{1-x}\text{Bi}_x\text{O} \times \text{Bi}$ $\text{Sr}_{1-x}\text{Bi}_x\text{O}$ a Conventional Superconducting Tip. Physical Review Letters, 2008, 101, 037002.	3.3	18
25	Improved Fitting Of the Spin Polarized Tunneling Conductance Near the Metal-Insulator Transition. AIP Conference Proceedings, 2006, , .	0.4	0
26	Planar MgB ₂ Josephson junctions and series arrays via nanolithography and ion damage. Applied Physics Letters, 2006, 88, 012509.	3.3	44
27	Negative magnetoresistance, negative electroresistance, and metallic behavior on the insulating side of the two-dimensional superconductor-insulator transition in granular Pb films. Physical Review B, 2006, 73, .	3.2	21
28	Variation of the density of states in amorphous GdSi at the metal-insulator transition. Physical Review B, 2004, 69, .	3.2	14
29	Proximity effect in ultrathin Pb/Ag multilayers within the Cooper limit. Physical Review B, 2003, 68, .	3.2	17
30	Crossover from two- to three-dimensional magnetic disorder in submonoatomic ferromagnetic layers. Physical Review B, 2003, 68, .	3.2	1
31	Josephson Effect in Pb/I/NbSe ₂ Scanning Tunneling Microscope Junctions. International Journal of Modern Physics B, 2003, 17, 3569-3574.	2.0	17
32	Spin Polarized Tunneling at the Metal-Insulator Transition. International Journal of Modern Physics B, 2003, 17, 3723-3725.	2.0	4
33	Do ballistic channels contribute to the magnetoresistance in magnetic tunnel junctions?. Applied Physics Letters, 2002, 80, 285-287.	3.3	8
34	Universal transport in two-dimensional granular superconductors. Physical Review B, 2002, 66, .	3.2	48
35	Granular superconductors and ferromagnets: A proximity-effect-based analogue. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 1153-1165.	0.6	17
36	Crossover from phase fluctuation to amplitude-dominated superconductivity: A model system. Physical Review B, 2001, 63, .	3.2	79

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37	The fabrication of reproducible superconducting scanning tunneling microscope tips. Review of Scientific Instruments, 2001, 72, 1688.	1.3	25
38	Fluctuation Dominated Josephson Tunneling with a Scanning Tunneling Microscope. Physical Review Letters, 2001, 87, 097004.	7.8	83
39	Transport properties of high-Tc planar Josephson junctions fabricated by nanolithography and ion implantation. Journal of Applied Physics, 2000, 87, 2978-2983.	2.5	48
40	Superconducting tunneling as a probe of sputtered oxide barriers. Applied Physics Letters, 1999, 75, 127-129.	3.3	7
41	Effect of ion-irradiation-induced disorder on the low-field magnetoresistance of La _{0.67} A _{0.33} MnO ₃ (A= Sr, Ca). Journal of Applied Physics, 1999, 85, 4791-4793.	2.5	8
42	c-axis Josephson Tunneling between YBa ₂ Cu ₃ O _{7-δ} and Pb: Direct Evidence for Mixed Order Parameter Symmetry in a High-Tc Superconductor. Physical Review Letters, 1997, 79, 3050-3053.	7.8	195
43	Pair Tunneling from c-Axis YBa ₂ Cu ₃ O _{7-δ} to Pb: Evidence for s-Wave Component from Microwave Induced Steps. Physical Review Letters, 1996, 76, 2161-2164.	7.8	128
44	Observation of a Discontinuous Transition from Strong to Weak Localization in 1D Granular Metal Wires. Physical Review Letters, 1996, 76, 668-671.	7.8	59
45	Direction of tunneling in Pb/I/YBa ₂ Cu ₃ O _{7-δ} tunnel junctions. Physical Review B, 1996, 54, 6734-6741.	3.2	65
46	Fabrication of all thin film YBa ₂ Cu ₃ O _{7-δ} /Pb Josephson tunnel junctions. Applied Physics Letters, 1995, 66, 105-107.	3.3	54
47	Observation of Josephson pair tunneling between a high-Tc cuprate (YBa ₂ Cu ₃ O _{7-δ}) and a conventional superconductor (Pb). Physical Review Letters, 1994, 72, 2267-2270.	7.8	418
48	Synthesis and properties of a-axis and b-axis oriented GdBa ₂ Cu ₃ O _{7-δ} high Tc thin films. Applied Physics Letters, 1992, 61, 2598-2600.	3.3	23
49	Conduction and superconductivity in quench condensed metallic films. AIP Conference Proceedings, 1992, , .	0.4	1
50	Electron tunneling into single crystals of YBa ₂ Cu ₃ O _{7-δ} . Physical Review B, 1991, 44, 11986-11996.	3.2	97
51	Reproducible tunneling data on chemically etched single crystals of YBa ₂ Cu ₃ O ₇ . Physical Review Letters, 1989, 63, 1008-1011.	7.8	431
52	Ion-beam-induced metal-insulator transition in YBa ₂ Cu ₃ O _{7-δ} : A mobility edge. Physical Review B, 1989, 39, 11599-11602.	3.2	144
53	Transition temperature of strong-coupled superconductors reanalyzed. Physical Review B, 1975, 12, 905-922.	3.2	2,690