Robert Mcdermott

List of Publications by Year
in descending order

37 papers	2,957 citations	331259 21 h-index	329751 37 g-index
39 all docs	39 docs citations	39 times ranked	2345 citing authors

#	Article	IF	Citations
1	Local Atomic Configuration Control of Superconductivity in the Undoped Pnictide Parent Compound BaFe₂As₂. ACS Applied Electronic Materials, 2022, 4, 1511-1517.	2.0	2
2	High-Fidelity Measurement of a Superconducting Qubit Using an On-Chip Microwave Photon Counter. Physical Review X, 2021, 11, .	2.8	16
3	Overlap junctions for superconducting quantum electronics and amplifiers. Applied Physics Letters, 2021, 118, 112601.	1.5	2
4	Correlated charge noise and relaxation errors in superconducting qubits. Nature, 2021, 594, 369-373.	13.7	109
5	3D integration and measurement of a semiconductor double quantum dot with a high-impedance TiN resonator. Npj Quantum Information, 2021, 7, .	2.8	19
6	A Josephson Junction with h-BN tunnel barrier: observation of low critical current noise. Journal of Physics Condensed Matter, 2021, 33, .	0.7	1
7	Microwave engineering for semiconductor quantum dots in a cQED architecture. Applied Physics Letters, 2020, 117, .	1.5	8
8	Interfacing Superconducting Qubits With Cryogenic Logic: Readout. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	21
9	Anomalous charge noise in superconducting qubits. Physical Review B, 2019, 100, .	1.1	36
10	A tunable quantum dissipator for active resonator reset in circuit QED. Quantum Science and Technology, 2019, 4, 025001.	2.6	9
11	Digital Coherent Control of a Superconducting Qubit. Physical Review Applied, 2019, 11, .	1.5	88
12	Quantumâ€“classical interface based on single flux quantum digital logic. Quantum Science and Technology, 2018, 3, 024004.	2.6	105
13	Optimizing microwave photodetection: inputâ€“output theory. Quantum Science and Technology, 2018, 3, 024009.	2.6	13
14	Measurement of a superconducting qubit with a microwave photon counter. Science, 2018, 361, 1239-1242.	6.0	62
15	Microwave-to-optical frequency conversion using a cesium atom coupled to a superconducting resonator. Physical Review A, 2017, 96, .	1.0	55
16	Reverse Isolation and Backaction of the SLUG Microwave Amplifier. Physical Review Applied, 2017, 8, .	1.5	6
17	Phonon-mediated quasiparticle poisoning of superconducting microwave resonators. Physical Review B, 2017, 96, .	1.1	50
18	Optimized coplanar waveguide resonators for a superconductorâ€“atom interface. Applied Physics Letters, 2016, 109, 092602.	1.5	13

#	Article	IF	Citations
19	Origin and Reduction of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>1</mml:mn><mml:mo stretchy="false">/</mml:mo><mml:mi>f</mml:mi></mml:math> Magnetic Flux Noise in Superconducting Devices. Physical Review Applied, 2016, 6, .	1.5	105
20	Scalable two- and four-qubit parity measurement with a threshold photon counter. Physical Review A, 2015, 92, .	1.0	12
21	High fidelity qubit readout with the superconducting low-inductance undulatory galvanometer microwave amplifier. Applied Physics Letters, 2014, 104, .	1.5	19
22	High-fidelity qubit measurement with a microwave-photon counter. Physical Review A, 2014, 90, .	1.0	36
23	Accurate Qubit Control with Single Flux Quantum Pulses. Physical Review Applied, 2014, 2, .	1.5	62
24	Epitaxial Al2O3 capacitors for low microwave loss superconducting quantum circuits. APL Materials, 2013, 1, .	2.2	9
25	Superconducting low-inductance undulatory galvanometer microwave amplifier. Applied Physics Letters, 2012, 100, .	1.5	32
26	Microwave Photon Counter Based on Josephson Junctions. Physical Review Letters, 2011, 107, 217401.	2.9	184
27	Microstrip superconducting quantum interference device amplifiers with submicron Josephson junctions: Enhanced gain at gigahertz frequencies. Applied Physics Letters, 2010, 97, .	1.5	11
28	Microstrip superconducting quantum interference device radio-frequency amplifier: Effects of negative feedback on input impedance. Applied Physics Letters, 2009, 94, .	1.5	6
29	Complex Inductance, Excess Noise, and Surface Magnetism in dc SQUIDs. Physical Review Letters, 2009, 103, 117001.	2.9	52
30	Microwave response of vortices in superconducting thin films of Re and Al. Physical Review B, 2009, 79, .	1.1	96
31	Materials Origins of Decoherence in Superconducting Qubits. IEEE Transactions on Applied Superconductivity, 2009, 19, 2-13.	1.1	76
32	Magnetism in SQUIDs at Millikelvin Temperatures. Physical Review Letters, 2008, 100, 227006.	2.9	127
33	State Tomography of Capacitively Shunted Phase Qubits with High Fidelity. Physical Review Letters, 2006, 97, 050502.	2.9	167
34	Simultaneous State Measurement of Coupled Josephson Phase Qubits. Science, 2005, 307, 1299-1302.	6.0	263
35	Decoherence in Josephson Qubits from Dielectric Loss. Physical Review Letters, 2005, 95, 210503.	2.9	616
36	Observation of Quantum Oscillations between a Josephson Phase Qubit and a Microscopic Resonator Using Fast Readout. Physical Review Letters, 2004, 93, 180401.	2.9	189

#	Article	IF	Citations
37	Liquid-State NMR and Scalar Couplings in Microtesla Magnetic Fields. Science, 2002, 295, 2247-2249.	6.0	279