Benjamin Chiaro

List of Publications by Year
in descending order

35 papers	6,407 citations	159525 30 h-index	360920 35 g-index
35 all docs	35 docs citations	35 times ranked	4690 citing authors

#	Article	IF	Citations
1	Direct measurement of nonlocal interactions in the many-body localized phase. Physical Review Research, 2022, 4, .	1.3	16
2	Accurately computing the electronic properties of a quantum ring. Nature, 2021, 594, 508-512.	13.7	47
3	Demonstrating a Continuous Set of Two-qubit Gates for Near-term Quantum Algorithms. Physical Review Letters, 2020, 125, 120504.	2.9	146
4	High speed flux sampling for tunable superconducting qubits with an embedded cryogenic transducer. Superconductor Science and Technology, 2019, 32, 015012.	1.8	13
5	Diabatic Gates for Frequency-Tunable Superconducting Qubits. Physical Review Letters, 2019, 123, 210501.	2.9	73
6	A blueprint for demonstrating quantum supremacy with superconducting qubits. Science, 2018, 360, 195-199.	6.0	307
7	A method for building low loss multi-layer wiring for superconducting microwave devices. Applied Physics Letters, 2018, 112, .	1.5	35
8	Observation of Classical-Quantum Crossover 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> Flux Noise and Its Paramagnetic Temperature Dependence. Physical Review Letters, 2017, 118, 057702.	2.9	87
9	Spectroscopic signatures of localization with interacting photons in superconducting qubits. Science, 2017, 358, 1175-1179.	6.0	315
10	Chiral ground-state currents of interacting photons in a synthetic magnetic field. Nature Physics, 2017, 13, 146-151.	6.5	292
11	Characterization and reduction of capacitive loss induced by sub-micron Josephson junction fabrication in superconducting qubits. Applied Physics Letters, 2017, 111, .	1.5	76
12	Ergodic dynamics and thermalization in an isolated quantum system. Nature Physics, 2016, 12, 1037-1041.	6.5	208
13	Measuring and Suppressing Quantum State Leakage in a Superconducting Qubit. Physical Review Letters, 2016, 116, 020501.	2.9	137
14	Scalablein situqubit calibration during repetitive error detection. Physical Review A, 2016, 94, .	1.0	30
15	Preserving entanglement during weak measurement demonstrated with a violation of the Bellâ€“Leggettâ€“Garg inequality. Npj Quantum Information, 2016, 2, .	2.8	41
16	Measurement-Induced State Transitions in a Superconducting Qubit: Beyond the Rotating Wave Approximation. Physical Review Letters, 2016, 117, 190503.	2.9	91
17	Digitized adiabatic quantum computing with a superconducting circuit. Nature, 2016, 534, 222-226.	13.7	339
18	Qubit Metrology of Ultralow Phase Noise Using Randomized Benchmarking. Physical Review Applied, 2015, 3, .	1.5	66

#	Article	IF	Citations
19	State preservation by repetitive error detection in a superconducting quantum circuit. Nature, 2015, 519, 66-69.	13.7	682
20	Digital quantum simulation of fermionic models with a superconducting circuit. Nature Communications, 2015, 6, 7654.	5.8	258
21	Rolling quantum dice with a superconducting qubit. Physical Review A, 2014, 90, .	1.0	27
22	Catching Time-Reversed Microwave Coherent State Photons with 99.4% Absorption Efficiency. Physical Review Letters, 2014, 112, .	2.9	92
23	Qubit Architecture with High Coherence and Fast Tunable Coupling. Physical Review Letters, 2014, 113, 220502.	2.9	387
24	Characterization and reduction of microfabrication-induced decoherence in superconducting quantum circuits. Applied Physics Letters, 2014, 105, .	1.5	85
25	Fabrication and characterization of aluminum airbridges for superconducting microwave circuits. Applied Physics Letters, 2014, 104, .	1.5	89
26	Superconducting quantum circuits at the surface code threshold for fault tolerance. Nature, 2014, 508, 500-503.	13.7	1,270
27	Observation of topological transitions in interacting quantum circuits. Nature, 2014, 515, 241-244.	13.7	162
28	Emulating weak localization using a solid-state quantum circuit. Nature Communications, 2014, 5, 5184.	5.8	30
29	Fast Accurate State Measurement with Superconducting Qubits. Physical Review Letters, 2014, 112, 190504.	2.9	273
30	Optimal Quantum Control Using Randomized Benchmarking. Physical Review Letters, 2014, 112, 240504.	2.9	160
31	Design and characterization of a lumped element single-ended superconducting microwave parametric amplifier with on-chip flux bias line. Applied Physics Letters, 2013, 103, .	1.5	73
32	Fluctuations from edge defects in superconducting resonators. Applied Physics Letters, 2013, 103, .	1.5	44
33	Excitation of Superconducting Qubits from Hot Nonequilibrium Quasiparticles. Physical Review Letters, 2013, 110, 150502.	2.9	48
34	Multiplexed dispersive readout of superconducting phase qubits. Applied Physics Letters, 2012, 101, .	1.5	67
35	Planar superconducting resonators with internal quality factors above one million. Applied Physics Letters, 2012, 100, .	1.5	341