Matthew Neeley

List of Publications by Year
in descending order

30 papers	7,995 citations	230014 27 h-index	511568 30 g-index
30 all docs	30 docs citations	30 times ranked	6892 citing authors

#	Article	IF	Citations
1	Time-crystalline eigenstate order on a quantum processor. Nature, 2022, 601, 531-536.	13.7	138
2	Resolving catastrophic error bursts from cosmic rays in large arrays of superconducting qubits. Nature Physics, 2022, 18, 107-111.	6.5	56
3	Direct measurement of nonlocal interactions in the many-body localized phase. Physical Review Research, 2022, 4, .	1.3	16
4	Quantum approximate optimization of non-planar graph problems on a planar superconducting processor. Nature Physics, 2021, 17, 332-336.	6.5	262
5	Removing leakage-induced correlated errors in superconducting quantum error correction. Nature Communications, 2021, 12, 1761.	5.8	49
6	Accurately computing the electronic properties of a quantum ring. Nature, 2021, 594, 508-512.	13.7	47
7	Exponential suppression of bit or phase errors with cyclic error correction. Nature, 2021, 595, 383-387.	13.7	172
8	Information scrambling in quantum circuits. Science, 2021, 374, 1479-1483.	6.0	127
9	Realizing topologically ordered states on a quantum processor. Science, 2021, 374, 1237-1241.	6.0	186
10	Demonstrating a Continuous Set of Two-qubit Gates for Near-term Quantum Algorithms. Physical Review Letters, 2020, 125, 120504.	2.9	146
11	OpenFermion: the electronic structure package for quantum computers. Quantum Science and Technology, 2020, 5, 034014.	2.6	214
12	High speed flux sampling for tunable superconducting qubits with an embedded cryogenic transducer. Superconductor Science and Technology, 2019, 32, 015012.	1.8	13
13	Diabatic Gates for Frequency-Tunable Superconducting Qubits. Physical Review Letters, 2019, 123, 210501.	2.9	73
14	Quantum supremacy using a programmable superconducting processor. Nature, 2019, 574, 505-510.	13.7	4,148
15	Qubit compatible superconducting interconnects. Quantum Science and Technology, 2018, 3, 014005.	2.6	95
16	A blueprint for demonstrating quantum supremacy with superconducting qubits. Science, 2018, 360, 195-199.	6.0	307
17	A method for building low loss multi-layer wiring for superconducting microwave devices. Applied Physics Letters, 2018, 112, .	1.5	35
18	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

#	Article	IF	Citations
19	Spectroscopic signatures of localization with interacting photons in superconducting qubits. Science, 2017, 358, 1175-1179.	6.0	315
20	Measuring and Suppressing Quantum State Leakage in a Superconducting Qubit. Physical Review Letters, 2016, 116, 020501.	2.9	137
21	Measurement-Induced State Transitions in a Superconducting Qubit: Beyond the Rotating Wave Approximation. Physical Review Letters, 2016, 117, 190503.	2.9	91
22	Dynamic quantum Kerr effect in circuit quantum electrodynamics. Physical Review A, 2012, 85, .	1.0	13
23	Photon shell game in three-resonator circuit quantum electrodynamics. Nature Physics, 2011, 7, 287-293.	6.5	114
24	Measurement of energy decay in superconducting qubits from nonequilibrium quasiparticles. Physical Review B, 2011, 84, .	1.1	81
25	Generation of three-qubit entangled states using superconducting phase qubits. Nature, 2010, 467, 570-573.	13.7	342
26	Quantum process tomography of a universal entangling gate implemented with Josephson phase qubits. Nature Physics, 2010, 6, 409-413.	6.5	186
27	Quantum process tomography of two-qubit controlled-Z and controlled-NOT gates using superconducting phase qubits. Physical Review B, 2010, 82, .	1.1	93
28	Microwave response of vortices in superconducting thin films of Re and Al. Physical Review B, 2009, 79, .	1.1	96
29	Improving the coherence time of superconducting coplanar resonators. Applied Physics Letters, 2009, 95, .	1.5	145
30	Microwave dielectric loss at single photon energies and millikelvin temperatures. Applied Physics Letters, 2008, 92, .	1.5	211