Andrew J Kerman

List of Publications by Year
in descending order

36 papers	4,915 citations	212478 28 h-index	388640 36 g-index
36 all docs	36 docs citations	36 times ranked	3911 citing authors

#	Article	IF	Citations
1	Automated design of superconducting circuits and its application to 4-local couplers. Npj Quantum Information, 2021, 7, .	2.8	17
2	Superconducting Circuit Realization of Combinatorial Gauge Symmetry. PRX Quantum, 2021, 2, .	3.5	2
3	Solid-state qubits integrated with superconducting through-silicon vias. Npj Quantum Information, 2020, 6, .	2.8	64
4	Superconducting qubit circuit emulation of a vector spin-1/2. New Journal of Physics, 2019, 21, 073030.	1.2	11
5	Distinguishing Coherent and Thermal Photon Noise in a Circuit Quantum Electrodynamical System. Physical Review Letters, 2018, 120, 260504.	2.9	46
6	Emulation of complex open quantum systems using superconducting qubits. Quantum Information Processing, 2017, 16, 1.	1.0	23
7	3D integrated superconducting qubits. Npj Quantum Information, 2017, 3, .	2.8	146
8	Coherent Coupled Qubits for Quantum Annealing. Physical Review Applied, 2017, 8, .	1.5	68
9	Suppressing relaxation in superconducting qubits by quasiparticle pumping. Science, 2016, 354, 1573-1577.	6.0	80
10	The flux qubit revisited to enhance coherence and reproducibility. Nature Communications, 2016, 7, 12964.	5.8	383
11	Readout of superconducting nanowire single-photon detectors at high count rates. Journal of Applied Physics, 2013, 113, .	1.1	86
12	High-speed and high-efficiency superconducting nanowire single photon detector array. Optics Express, 2013, 21, 1440.	1.7	167
13	Quantum information processing using quasiclassical electromagnetic interactions between qubits and electrical resonators. New Journal of Physics, 2013, 15, 123011.	1.2	37
14	Fluxâ€“charge duality and topological quantum phase fluctuations in quasi-one-dimensional superconductors. New Journal of Physics, 2013, 15, 105017.	1.2	26
15	Detectors Based on Superconductors. Experimental Methods in the Physical Sciences, 2013, 45, 185-216.	0.1	1
16	Quantum simulator of an open quantum system using superconducting qubits: exciton transport in photosynthetic complexes. New Journal of Physics, 2012, 14, 105013.	1.2	79
17	Single Photon Counting from Individual Nanocrystals in the Infrared. Nano Letters, 2012, 12, 2953-2958.	4.5	48
18	Metastable Superconducting Qubit. Physical Review Letters, 2010, 104, 027002.	2.9	21

#	Article	IF	Citations
19	High-order temporal coherences ofâ€¨chaotic and laser light. Optics Express, 2010, 18, 1430.	1.7	60
20	Photon-number-resolution with sub-30-ps timing using multi-element superconducting nanowire single photon detectors. Journal of Modern Optics, 2009, 56, 364-373.	0.6	122
21	Suppressed Critical Current in Superconducting Nanowire Single-Photon Detectors With High Fill-Factors. IEEE Transactions on Applied Superconductivity, 2009, 19, 318-322.	1.1	24
22	Optical properties of superconducting nanowire single-photon detectors. Optics Express, 2008, 16, 10750.	1.7	146
23	High-Fidelity Quantum Operations on Superconducting Qubits in the Presence of Noise. Physical Review Letters, 2008, 101, 070501.	2.9	37
24	Modeling the Electrical and Thermal Response of Superconducting Nanowire Single-Photon Detectors. IEEE Transactions on Applied Superconductivity, 2007, 17, 581-585.	1.1	174
25	Multi-Element Superconducting Nanowire Single-Photon Detector. IEEE Transactions on Applied Superconductivity, 2007, 17, 279-284.	1.1	113
26	Constriction-limited detection efficiency of superconducting nanowire single-photon detectors. Applied Physics Letters, 2007, 90, 101110.	1.5	163
27	Kinetic-inductance-limited reset time of superconducting nanowire photon counters. Applied Physics Letters, 2006, 88, 111116.	1.5	358
28	781 Mbit/s photon-counting optical communications using a superconducting nanowire detector. Optics Letters, 2006, 31, 444.	1.7	161
29	Nanowire single-photon detector with an integrated optical cavity and anti-reflection coating. Optics Express, 2006, 14, 527.	1.7	350
30	Condensation of Pairs of Fermionic Atoms near a Feshbach Resonance. Physical Review Letters, 2004, 92, 120403.	2.9	1,048
31	Production and State-Selective Detection of Ultracold RbCs Molecules. Physical Review Letters, 2004, 92, 153001.	2.9	166
32	High Resolution Feshbach Spectroscopy of Cesium. Physical Review Letters, 2000, 85, 2717-2720.	2.9	106
33	Beyond Optical Molasses: 3D Raman Sideband Cooling of Atomic Cesium to High Phase-Space Density. Physical Review Letters, 2000, 84, 439-442.	2.9	197
34	Suppression of Atomic Radiative Collisions by Tuning the Ground State Scattering Length. Physical Review Letters, 1999, 83, 943-946.	2.9	45
35	Observation of Low-Field Feshbach Resonances in Collisions of Cesium Atoms. Physical Review Letters, 1999, 82, 1406-1409.	2.9	160
36	Degenerate Raman Sideband Cooling of Trapped Cesium Atoms at Very High Atomic Densities. Physical Review Letters, 1998, 81, 5768-5771.	2.9	180