Frederick Wellstood

List of Publications by Year
in descending order

55 papers	1,842 citations	279487 23 h-index	264894 42 g-index
55 all docs	55 docs citations	55 times ranked	1820 citing authors

#	Article	IF	Citations
1	Hot-electron effects in metals. Physical Review B, 1994, 49, 5942-5955.	1.1	394
2	An analysis method for asymmetric resonator transmission applied to superconducting devices. Journal of Applied Physics, 2012, 111, .	1.1	155
3	Quantitative imaging of sheet resistance with a scanning near-field microwave microscope. Applied Physics Letters, 1998, 72, 861-863.	1.5	109
4	Nearâ€field scanning microwave microscope with 100 Î¼m resolution. Applied Physics Letters, 1996, 69, 3272-3274.	1.5	107
5	Surface resistance imaging with a scanning near-field microwave microscope. Applied Physics Letters, 1997, 71, 1736-1738.	1.5	89
6	Magnetic Flux Noise in dc SQUIDs: Temperature and Geometry Dependence. Physical Review Letters, 2013, 110, 147002.	2.9	79
7	Loss Dependence on Geometry and Applied Power in Superconducting Coplanar Resonators. IEEE Transactions on Applied Superconductivity, 2011, 21, 879-882.	1.1	52
8	Microwave attenuators for use with quantum devices below 100 mK. Journal of Applied Physics, 2017, 121, .	1.1	52
9	Oneâ€dimensional magnetic flux microscope based on the dc superconducting quantum interference device. Applied Physics Letters, 1992, 61, 598-600.	1.5	49
10	Autler-Townes splitting in a three-dimensional transmon superconducting qubit. Physical Review B, 2013, 88, .	1.1	48
11	Magnetic permeability imaging of metals with a scanning near-field microwave microscope. Applied Physics Letters, 2000, 77, 4404-4406.	1.5	45
12	Projected Dipole Moments of Individual Two-Level Defects Extracted Using Circuit Quantum Electrodynamics. Physical Review Letters, 2016, 116, 167002.	2.9	45
13	Raman coherence in a circuit quantum electrodynamics lambda system. Nature Physics, 2016, 12, 75-79.	6.5	45
14	Anomalous avoided level crossings in a Cooper-pair box spectrum. Physical Review B, 2008, 78, .	1.1	43
15	Microwave photon Fock state generation by stimulated Raman adiabatic passage. Nature Communications, 2017, 8, 14148.	5.8	43
16	Quantitative topographic imaging using a near-field scanning microwave microscope. Applied Physics Letters, 1998, 72, 1778-1780.	1.5	34
17	Pure dephasing in flux qubits due to flux noise with spectral density scaling as1/fÎ±. Physical Review B, 2012, 85, .	1.1	33
18	Temperature dependence of low-frequency noise in Alâ€“Al2O3â€“Al single-electron transistors. Journal of Applied Physics, 2000, 88, 6536-6540.	1.1	30

#	Article	IF	Citations
19	Multilevel effects in the Rabi oscillations of a Josephson phase qubit. Physical Review B, 2008, 78, .	1.1	26
20	Observation of Autlerâ€“Townes effect in a dispersively dressed Jaynesâ€“Cummings system. New Journal of Physics, 2013, 15, 125007.	1.2	25
21	Microwave Nonlinearities in High-Tc Superconductors: The Truth Is out There. Journal of Superconductivity and Novel Magnetism, 1999, 12, 353-362.	0.5	24
22	A 30 mK, 13.5 T scanning tunneling microscope with two independent tips. Review of Scientific Instruments, 2014, 85, 043706.	0.6	24
23	Landau-Zener population control and dipole measurement of a two-level-system bath. Physical Review B, 2014, 90, .	1.1	23
24	Imaging of microwave intermodulation fields in a superconducting microstrip resonator. Applied Physics Letters, 1999, 75, 2824-2826.	1.5	21
25	Relationship between spatial resolution and noise in scanning superconducting quantum interference device microscopy. Journal of Applied Physics, 2002, 92, 4731-4740.	1.1	21
26	Steady-state thermodynamics of nonequilibrium quasiparticles in a Cooper-pair box. Physical Review B, 2007, 76, .	1.1	21
27	Strong-Field Effects in the Rabi Oscillations of the Superconducting Phase Qubit. IEEE Transactions on Applied Superconductivity, 2007, 17, 105-108.	1.1	17
28	Distributed microwave damping filters for superconducting quantum interference devices. Applied Physics Letters, 1997, 70, 2186-2188.	1.5	15
29	Thin-film superconducting resonator tunable to the ground-state hyperfine splitting of 87Rb. AIP Advances, 2011, 1, .	0.6	15
30	Position noise in scanning superconducting quantum interference device microscopy. Applied Physics Letters, 2004, 84, 5001-5003.	1.5	13
31	Spectroscopy of a Cooper-pair box coupled to a two-level system via charge and critical current. Physical Review B, 2013, 87, .	1.1	13
32	Nonlinear microwave photon occupancy of a driven resonator strongly coupled to a transmon qubit. Physical Review A, 2015, 92, .	1.0	13
33	Cavity quantum electrodynamics using a near-resonance two-level system: Emergence of the Glauber state. Applied Physics Letters, 2015, 106, .	1.5	13
34	Implementation of a generalized controlled-NOT gate between fixed-frequency transmons. Physical Review A, 2019, 99, .	1.0	13
35	Behavior of Alâ€“Al2O3â€“Al single-electron transistors from 85 mK to 5 K. Applied Physics Letters, 1998, 72, 2268-2270.	1.5	9
36	Electric field effect control of a superconducting YBa2Cu3O7inductor. Applied Physics Letters, 1993, 62, 3198-3200.	1.5	8

#	Article	IF	Citations
37	A Cryo-Cooled Scanning SQUID Microscope for Imaging High-Frequency Magnetic Fields. IEEE Transactions on Applied Superconductivity, 2011, 21, 412-415.	1.1	8
38	Dynamics of a Charged Fluctuator in an Alâ€“AlOxâ€“Al Single-Electron Transistor. Journal of Low Temperature Physics, 2001, 123, 103-126.	0.6	7
39	Role of Geometry on the Color of Flux Noise in dc SQUIDs. IEEE Transactions on Applied Superconductivity, 2011, 21, 856-859.	1.1	7
40	Asymmetric superconducting quantum interference devices for suppression of phase diffusion in small Josephson junctions. Journal of Applied Physics, 2013, 113, 183905.	1.1	7
41	Effects of nonequilibrium quasiparticles in a thin-film superconducting microwave resonator under optical illumination. Physical Review B, 2016, 93, .	1.1	7
42	Pulse Current Measurements and Rabi Oscillations in a dc SQUID Phase Qubit. IEEE Transactions on Applied Superconductivity, 2007, 17, 162-165.	1.1	6
43	Microwave electric-field imaging using a high-Tc scanning superconducting quantum interference device. Applied Physics Letters, 1998, 73, 984-986.	1.5	5
44	Hot electron heatsinks for microwave attenuators below 100â€‰mK. Applied Physics Letters, 2019, 114, 152602.	1.5	5
45	Characterization of coherent population-trapped states in a circuit-QED <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Î</mml:mi></mml:math> system. Physical Review A, 2017, 96, .	1.0	4
46	Scanning tunneling Andreev microscopy of titanium nitride thin films. Physical Review B, 2019, 100, .	1.1	4
47	Dc SQUID Phase Qubit With an LC Filter. IEEE Transactions on Applied Superconductivity, 2009, 19, 957-960.	1.1	3
48	Superposition of Inductive and Capacitive Coupling in Superconducting LC Resonators. IEEE Transactions on Applied Superconductivity, 2011, 21, 875-878.	1.1	3
49	Anomalous Switching Curves in a dc SQUID Phase Qubit. IEEE Transactions on Applied Superconductivity, 2011, 21, 860-863.	1.1	3
50	Plasma etching of superconducting Niobium tips for scanning tunneling microscopy. Journal of Applied Physics, 2014, 116, 014308.	1.1	3
51	Long-lived transmons with different electrode layouts. MRS Advances, 2022, 7, 273-277.	0.5	2
52	Identifying Sources of Decoherence in a dc SQUID Phase Qubit With a Sub-$mu{m m}$ Junction and Interdigitated Capacitor. IEEE Transactions on Applied Superconductivity, 2011, 21, 867-870.	1.1	1
53	Simultaneously scanning two connected tips in a scanning tunneling microscope. Journal of Applied Physics, 2017, 121, 214501.	1.1	1
54	DC SQUID Phase Qubit Coupled to an On-Chip LC Resonator. IEEE Transactions on Applied Superconductivity, 2013, 23, 1701504-1701504.	1.1	0

#	Article	IF	Citations
55	SINGLE JOSEPHSON JUNCTIONS AS QUBITS. , 2005, , .		0