Adam McCaughan

List of Publications by Year
in descending order

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27 papers	931 citations	516710 16 h-index	580821 25 g-index
27 all docs	27 docs citations	27 times ranked	938 citing authors

#	Article	IF	Citations
1	Single-photon imager based on a superconducting nanowire delay line. Nature Photonics, 2017, 11, 247-251.	31.4	127
2	A Superconducting-Nanowire Three-Terminal Electrothermal Device. Nano Letters, 2014, 14, 5748-5753.	9.1	116
3	Universal scaling of the critical temperature for thin films near the superconducting-to-insulating transition. Physical Review B, 2014, 90, .	3.2	70
4	All-silicon light-emitting diodes waveguide-integrated with superconducting single-photon detectors. Applied Physics Letters, 2017, 111, .	3.3	66
5	A superconducting thermal switch with ultrahigh impedance for interfacing superconductors to semiconductors. Nature Electronics, 2019, 2, 451-456.	26.0	56
6	Superconducting optoelectronic loop neurons. Journal of Applied Physics, 2019, 126, .	2.5	51
7	Bias sputtered NbN and superconducting nanowire devices. Applied Physics Letters, 2017, 111, .	3.3	46
8	Circuit designs for superconducting optoelectronic loop neurons. Journal of Applied Physics, 2018, 124, .	2.5	41
9	A compact superconducting nanowire memory element operated by nanowire cryotrons. Superconductor Science and Technology, 2018, 31, 035009.	3.5	40
10	A superconducting nanowire can be modeled by using SPICE. Superconductor Science and Technology, 2018, 31, 055010.	3.5	39
11	Superconducting-nanowire single-photon-detector linear array. Applied Physics Letters, 2013, 103, 142602.	3.3	37
12	Microwave dynamics of high aspect ratio superconducting nanowires studied using self-resonance. Journal of Applied Physics, 2016, 119, .	2.5	37
13	A nanocryotron comparator can connect single-flux-quantum circuits to conventional electronics. Superconductor Science and Technology, 2017, 30, 044002.	3.5	36
14	Fabrication Process Yielding Saturated Nanowire Single-Photon Detectors With 24-ps Jitter. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 1-7.	2.9	27
15	Using Geometry To Sense Current. Nano Letters, 2016, 16, 7626-7631.	9.1	25
16	Frequency Pulling and Mixing of Relaxation Oscillations in Superconducting Nanowires. Physical Review Applied, 2018, 9, .	3.8	17
17	III-V photonic integrated circuit with waveguide-coupled light-emitting diodes and WSi superconducting single-photon detectors. Applied Physics Letters, 2019, 115, 081105.	3.3	16
18	Bridging the Gap Between Nanowires and Josephson Junctions: A Superconducting Device Based on Controlled Fluxon Transfer. Physical Review Applied, 2019, 11, .	3.8	14

#	Article	IF	Citations
19	Readout architectures for superconducting nanowire single photon detectors. Superconductor Science and Technology, 2018, 31, 040501.	3.5	12
20	A Stochastic SPICE Model for Superconducting Nanowire Single Photon Detectors and Other Nanowire Devices. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	12
21	Multilayered Heater Nanocryotron: A Superconducting-Nanowire-Based Thermal Switch. Physical Review Applied, 2020, 14, .	3.8	12
22	Microring resonator-coupled photoluminescence from silicon W centers. JPhys Photonics, 2020, 2, 045001.	4.6	12
23	A kinetic-inductance-based superconducting memory element with shunting and sub-nanosecond write times. Superconductor Science and Technology, 2019, 32, 015005.	3.5	11
24	PHIDL: <scp>Python</scp>-based layout and geometry creation for nanolithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	1.2	7
25	Microresonator-enhanced, Waveguide-coupled Emission from Silicon Defect Centers for Superconducting Optoelectronic Networks. , 2020, , .		2
26	A high-density customizable microwave vacuum feedthrough for cryogenic applications. Review of Scientific Instruments, 2020, 91, 015114.	1.3	1
27	Progress in Superconducting Optoelectronic Networks for Neuromorphic Computing. , 2020, , .		1