Adam McCaughan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6488606/publications.pdf

Version: 2024-02-01

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	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
2	Multilayered Heater Nanocryotron: A Superconducting-Nanowire-Based Thermal Switch. Physical Review Applied, 2020, 14, .	3.8	12
3	A high-density customizable microwave vacuum feedthrough for cryogenic applications. Review of Scientific Instruments, 2020, 91, 015114.	1.3	1
4	Microring resonator-coupled photoluminescence from silicon W centers. JPhys Photonics, 2020, 2, 045001.	4.6	12
5	Progress in Superconducting Optoelectronic Networks for Neuromorphic Computing. , 2020, , .		1
6	Microresonator-enhanced, Waveguide-coupled Emission from Silicon Defect Centers for Superconducting Optoelectronic Networks. , 2020, , .		2
7	Superconducting optoelectronic loop neurons. Journal of Applied Physics, 2019, 126, .	2.5	51
8	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
9	A superconducting thermal switch with ultrahigh impedance for interfacing superconductors to semiconductors. Nature Electronics, 2019, 2, 451-456.	26.0	56
10	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
11	Bridging the Gap Between Nanowires and Josephson Junctions: A Superconducting Device Based on Controlled Fluxon Transfer. Physical Review Applied, 2019, 11, .	3.8	14
12	A kinetic-inductance-based superconducting memory element with shunting and sub-nanosecond write times. Superconductor Science and Technology, 2019, 32, 015005.	3.5	11
13	A superconducting nanowire can be modeled by using SPICE. Superconductor Science and Technology, 2018, 31, 055010.	3.5	39
14	A compact superconducting nanowire memory element operated by nanowire cryotrons. Superconductor Science and Technology, 2018, 31, 035009.	3.5	40
15	Readout architectures for superconducting nanowire single photon detectors. Superconductor Science and Technology, 2018, 31, 040501.	3.5	12
16	Circuit designs for superconducting optoelectronic loop neurons. Journal of Applied Physics, 2018, 124, .	2.5	41
17	Frequency Pulling and Mixing of Relaxation Oscillations in Superconducting Nanowires. Physical Review Applied, 2018, 9, .	3.8	17
18	A nanocryotron comparator can connect single-flux-quantum circuits to conventional electronics. Superconductor Science and Technology, 2017, 30, 044002.	3.5	36

#	Article	IF	Citations
19	Single-photon imager based on a superconducting nanowire delay line. Nature Photonics, 2017, 11, 247-251.	31.4	127
20	All-silicon light-emitting diodes waveguide-integrated with superconducting single-photon detectors. Applied Physics Letters, 2017, 111, .	3.3	66
21	Bias sputtered NbN and superconducting nanowire devices. Applied Physics Letters, 2017, 111, .	3.3	46
22	Using Geometry To Sense Current. Nano Letters, 2016, 16, 7626-7631.	9.1	25
23	Microwave dynamics of high aspect ratio superconducting nanowires studied using self-resonance. Journal of Applied Physics, 2016, 119, .	2.5	37
24	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
25	Universal scaling of the critical temperature for thin films near the superconducting-to-insulating transition. Physical Review B, 2014, 90, .	3.2	70
26	A Superconducting-Nanowire Three-Terminal Electrothermal Device. Nano Letters, 2014, 14, 5748-5753.	9.1	116
27	Superconducting-nanowire single-photon-detector linear array. Applied Physics Letters, 2013, 103, 142602.	3.3	37