Sebastian De Graaf

List of Publications by Year
in descending order

23 papers	500 citations	840776 11 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	732 citing authors

#	Article	IF	Citations
1	On the nature of decoherence in quantum circuits: Revealing the structural motif of the surface radicals in Î±-Al ₂ O ₃. Science Advances, 2022, 8, eabm6169.	10.3	5
2	Characterizing Scattering Parameters of Superconducting Quantum Integrated Circuits at Milli-Kelvin Temperatures. IEEE Access, 2022, 10, 43376-43386.	4.2	7
3	Chemical and structural identification of material defects in superconducting quantum circuits. Materials for Quantum Technology, 2022, 2, 032001.	3.1	7
4	Quantifying dynamics and interactions of individual spurious low-energy fluctuators in superconducting circuits. Physical Review B, 2021, 103, .	3.2	6
5	Fast Tunable High- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Q</mml:mi></mml:math> -Factor Superconducting Microwave Resonators. Physical Review Applied, 2020, 14, .	3.8	29
6	Dual Fraunhofer interference and charge fluctuations in long quantum phase slip wires. Physical Review B, 2020, 102, .	3.2	0
7	Two-level systems in superconducting quantum devices due to trapped quasiparticles. Science Advances, 2020, 6, .	10.3	44
8	Charge control of blockade of Cooper pair tunneling in highly disordered TiN nanowires in an inductive environment. Physical Review B, 2019, 99, .	3.2	10
9	Probing photon statistics of coherent states by continuous wave mixing on a two-level system. Physical Review A, 2019, 100, .	2.5	11
10	Near-Field Scanning Microwave Microscopy in the Single Photon Regime. Scientific Reports, 2019, 9, 12539.	3.3	26
11	Charge quantum interference device. Nature Physics, 2018, 14, 590-594.	16.7	47
12	Suppression of low-frequency charge noise in superconducting resonators by surface spin desorption. Nature Communications, 2018, 9, 1143.	12.8	57
13	1/f frequency noise of superconducting resonators in large magnetic fields. Applied Physics Letters, 2018, 113, .	3.3	5
14	Direct Identification of Dilute Surface Spins on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>Al</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml: : Origin of Flux Noise in Quantum Circuits. Physical Review Letters, 2017, 118, 057703.	7.8	58
15	Multiplexing Superconducting Qubit Circuit for Single Microwave Photon Generation. Journal of Low Temperature Physics, 2017, 189, 60-75.	1.4	6
16	Coherent interaction with two-level fluctuators using near field scanning microwave microscopy. Scientific Reports, 2015, 5, 17176.	3.3	9
17	Coupling of a locally implanted rare-earth ion ensemble to a superconducting micro-resonator. Applied Physics Letters, 2014, 105, .	3.3	10
18	Mixed valence radical cations and intermolecular complexes derived from indenofluorene-extended tetrathiafulvalenes. Journal of Materials Chemistry C, 2014, 2, 10428-10438.	5.5	47

#	Article	IF	Citations
19	Galvanically split superconducting microwave resonators for introducing internal voltage bias. Applied Physics Letters, 2014, 104, 052601.	3.3	18
20	Charge Qubit Coupled to an Intense Microwave Electromagnetic Field in a Superconducting Nb Device: Evidence for Photon-Assisted Quasiparticle Tunneling. Physical Review Letters, 2013, 111, 137002.	7.8	24
21	Effects of quasiparticle tunnelling in a circuit-QED realization of a strongly driven two-level system. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 224019.	1.5	4
22	A near-field scanning microwave microscope based on a superconducting resonator for low power measurements. Review of Scientific Instruments, 2013, 84, 023706.	1.3	26
23	Magnetic field resilient superconducting fractal resonators for coupling to free spins. Journal of Applied Physics, 2012, 112, .	2.5	44