Gary Steele

List of Publications by Year
in descending order

62 papers	6,967 citations	159573 30 h-index	118840 62 g-index
62 all docs	62 docs citations	62 times ranked	9979 citing authors

#	Article	IF	Citations
1	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. 2D Materials, 2014, 1, 011002.	4.4	1,375
2	Elastic Properties of Freely Suspended MoS₂ Nanosheets. Advanced Materials, 2012, 24, 772-775.	21.0	905
3	Laser-Thinning of MoS₂: On Demand Generation of a Single-Layer Semiconductor. Nano Letters, 2012, 12, 3187-3192.	9.1	567
4	Large and Tunable Photothermoelectric Effect in Single-Layer MoS₂. Nano Letters, 2013, 13, 358-363.	9.1	566
5	The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS2. Nano Research, 2014, 7, 561-571.	10.4	497
6	Strong Coupling Between Single-Electron Tunneling and Nanomechanical Motion. Science, 2009, 325, 1103-1107.	12.6	348
7	Carbon Nanotubes as Ultrahigh Quality Factor Mechanical Resonators. Nano Letters, 2009, 9, 2547-2552.	9.1	322
8	Quantum transport in carbon nanotubes. Reviews of Modern Physics, 2015, 87, 703-764.	45.6	292
9	Optomechanical coupling between a multilayer graphene mechanical resonator and a superconducting microwave cavity. Nature Nanotechnology, 2014, 9, 820-824.	31.5	217
10	Singleâ€Layer MoS₂ Mechanical Resonators. Advanced Materials, 2013, 25, 6719-6723.	21.0	201
11	Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. 2D Materials, 2015, 2, 015006.	4.4	149
12	Tunable few-electron double quantum dots and Klein tunnelling in ultraclean carbon nanotubes. Nature Nanotechnology, 2009, 4, 363-367.	31.5	125
13	Large spin-orbit coupling in carbon nanotubes. Nature Communications, 2013, 4, 1573.	12.8	109
14	Valleyâ€“spin blockade and spin resonance in carbon nanotubes. Nature Nanotechnology, 2012, 7, 630-634.	31.5	103
15	A High Quality Factor Carbon Nanotube Mechanical Resonator at 39 GHz. Nano Letters, 2012, 12, 193-197.	9.1	101
16	Large cooperativity and microkelvin cooling with a three-dimensional optomechanical cavity. Nature Communications, 2015, 6, 8491.	12.8	74
17	Folded MoS2 layers with reduced interlayer coupling. Nano Research, 2014, 7, 572-578.	10.4	71
18	Multi-mode ultra-strong coupling in circuit quantum electrodynamics. Npj Quantum Information, 2017, 3, .	6.7	69

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19	Strong and tunable mode coupling in carbon nanotube resonators. Physical Review B, 2012, 86, .	3.2	59
20	Coupling carbon nanotube mechanics to a superconducting circuit. Scientific Reports, 2012, 2, 599.	3.3	52
21	Probing the charge of a quantum dot with a nanomechanical resonator. Physical Review B, 2012, 86, .	3.2	49
22	Silicon nitride membrane resonators at millikelvin temperatures with quality factors exceeding 108. Applied Physics Letters, 2015, 107, 263501.	3.3	44
23	A ballistic graphene superconducting microwave circuit. Nature Communications, 2018, 9, 4069.	12.8	42
24	Coupling microwave photons to a mechanical resonator using quantum interference. Nature Communications, 2019, 10, 5359.	12.8	42
25	Sideband cooling of nearly degenerate micromechanical oscillators in a multimode optomechanical system. Physical Review A, 2019, 99, .	2.5	41
26	Observation of decoherence in a carbon nanotube mechanical resonator. Nature Communications, 2014, 5, 5819.	12.8	38
27	Time-domain response of atomically thin MoS2 nanomechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	37
28	Probing Optical Transitions in Individual Carbon Nanotubes Using Polarized Photocurrent Spectroscopy. Nano Letters, 2012, 12, 5649-5653.	9.1	35
29	Molybdenum-rhenium alloy based high-Q superconducting microwave resonators. Applied Physics Letters, 2014, 105, 222601.	3.3	35
30	Negative nonlinear damping of a multilayer graphene mechanical resonator. Physical Review B, 2016, 93, .	3.2	33
31	Observation and stabilization of photonic Fock states in a hot radio-frequency resonator. Science, 2019, 363, 1072-1075.	12.6	31
32	Cavity electromechanics with parametric mechanical driving. Nature Communications, 2020, 11, 1589.	12.8	28
33	Photon-pressure strong coupling between two superconducting circuits. Nature Physics, 2021, 17, 85-91.	16.7	25
34	Single electron tunnelling through highâ€<i>Q</i> singleâ€wall carbon nanotube NEMS resonators. Physica Status Solidi (B): Basic Research, 2010, 247, 2974-2979.	1.5	23
35	Strong and tunable couplings in flux-mediated optomechanics. Physical Review B, 2017, 96, .	3.2	23
36	Flux-mediated optomechanics with a transmon qubit in the single-photon ultrastrong-coupling regime. Physical Review Research, 2020, 2, .	3.6	20

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37	QuCAT: quantum circuit analyzer tool in Python. New Journal of Physics, 2020, 22, 013025.	2.9	18
38	Giant modulation of the electronic band gap of carbon nanotubes by dielectric screening. Scientific Reports, 2017, 7, 8828.	3.3	16
39	Imaging the formation of a p-n junction in a suspended carbon nanotube with scanning photocurrent microscopy. Journal of Applied Physics, 2011, 110, .	2.5	15
40	Superconducting electro-mechanics to test DiÃ³siâ€“Penrose effects of general relativity in massive superpositions. AVS Quantum Science, 2021, 3, .	4.9	15
41	Synthesizing multi-phonon quantum superposition states using flux-mediated three-body interactions with superconducting qubits. Npj Quantum Information, 2019, 5, .	6.7	14
42	Multi-terminal electronic transport in boron nitride encapsulated TiS₃ nanosheets. 2D Materials, 2020, 7, 015009.	4.4	14
43	Broadband architecture for galvanically accessible superconducting microwave resonators. Applied Physics Letters, 2015, 107, 192602.	3.3	12
44	Identifying signatures of photothermal current in a double-gated semiconducting nanotube. Nature Communications, 2014, 5, 4987.	12.8	11
45	Weak localization in boron nitride encapsulated bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2019, 99, .	3.2	11
46	Nature of the Lamb shift in weakly anharmonic atoms: From normal-mode splitting to quantum fluctuations. Physical Review A, 2018, 98, .	2.5	10
47	Submicrosecond-timescale readout of carbon nanotube mechanical motion. Applied Physics Letters, 2013, 103, .	3.3	9
48	Tunable and weakly invasive probing of a superconducting resonator based on electromagnetically induced transparency. Physical Review A, 2020, 102, .	2.5	9
49	Optomechanical response of a nonlinear mechanical resonator. Physical Review B, 2015, 92, .	3.2	8
50	Cooling photon-pressure circuits into the quantum regime. Science Advances, 2021, 7, eabg6653.	10.3	8
51	Four-wave-cooling to the single phonon level in Kerr optomechanics. Communications Physics, 2022, 5, .	5.3	8
52	Interaction-Driven Giant Orbital Magnetic Moments in Carbon Nanotubes. Physical Review Letters, 2018, 121, 127704.	7.8	5
53	Optomechanical Microwave Amplification without Mechanical Amplification. Physical Review Applied, 2020, 13, .	3.8	5
54	Sideband transitions in a two-mode Josephson circuit driven beyond the rotating-wave approximation. Physical Review Research, 2021, 3, .	3.6	5

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55	Level attraction and idler resonance in a strongly driven Josephson cavity. Physical Review Research, 2021, 3, .	3.6	5
56	Nanoelectromechanical resonators from high- <i>T</i> _{<i>c</i>} superconducting crystals of Bi ₂ Sr ₂ Ca ₁ Cu ₂ O$_{8+delta}$. 2D Materials, 2019, 6, 025027.	4.4	4
57	Current Detection Using a Josephson Parametric Upconverter. Physical Review Applied, 2020, 14, .	3.8	4
58	Critical current fluctuations in graphene Josephson junctions. Scientific Reports, 2021, 11, 19900.	3.3	4
59	Phonon-number resolution of voltage-biased mechanical oscillators with weakly anharmonic superconducting circuits. Physical Review A, 2021, 104, .	2.5	4
60	Mechanical dissipation in MoRe superconducting metal drums. Applied Physics Letters, 2017, 110, 083103.	3.3	2
61	Two-photon sideband interaction in a driven quantum Rabi model: Quantitative discussions with derived longitudinal drives and beyond the rotating wave approximation. Physical Review Research, 2022, 4, .	3.6	2
62	A massive squeeze. Nature Physics, 2021, 17, 299-300.	16.7	1