Gary Steele

List of Publications by Year in Descending Order

56 papers	5,416 citations	27 h-index	62 g-index
62 ext. papers	6,265 ext. citations	10.2 avg, IF	5.77 L-index

#	Paper	IF	Citations
56	Phonon-number resolution of voltage-biased mechanical oscillators with weakly anharmonic superconducting circuits. *Physical Review A*, **2021**, 104,	2.6	1
55	Cooling photon-pressure circuits into the quantum regime. *Science Advances*, **2021**, 7, eabg6653	14.3	0
54	Critical current fluctuations in graphene Josephson junctions. *Scientific Reports*, **2021**, 11, 19900	4.9	0
53	Photon-pressure strong coupling between two superconducting circuits. *Nature Physics*, **2021**, 17, 85-91	16.2	5
52	Superconducting electro-mechanics to test DiPenrose effects of general relativity in massive superpositions. *AVS Quantum Science*, **2021**, 3, 035601	10.3	5
51	QuCAT: quantum circuit analyzer tool in Python. *New Journal of Physics*, **2020**, 22, 013025	2.9	4
50	Optomechanical Microwave Amplification without Mechanical Amplification. *Physical Review Applied*, **2020**, 13,	4.3	2
49	Cavity electromechanics with parametric mechanical driving. *Nature Communications*, **2020**, 11, 1589	17.4	11
48	Flux-mediated optomechanics with a transmon qubit in the single-photon ultrastrong-coupling regime. *Physical Review Research*, **2020**, 2,	3.9	6
47	Tunable and weakly invasive probing of a superconducting resonator based on electromagnetically induced transparency. *Physical Review A*, **2020**, 102,	2.6	1
46	Multi-terminal electronic transport in boron nitride encapsulated TiS3 nanosheets. *2D Materials*, **2020**, 7, 015009	5.9	8
45	Observation and stabilization of photonic Fock states in a hot radio-frequency resonator. *Science*, **2019**, 363, 1072-1075	33.3	19
44	Weak localization in boron nitride encapsulated bilayer MoS2. *Physical Review B*, **2019**, 99,	3.3	9
43	Nanoelectromechanical resonators from high- T c superconducting crystals of Bi 2 Sr 2 Ca 1 Cu 2 O$_{8+delta}$. *2D Materials*, **2019**, 6, 025027	5.9	2
42	Sideband cooling of nearly degenerate micromechanical oscillators in a multimode optomechanical system. *Physical Review A*, **2019**, 99,	2.6	19
41	Coupling microwave photons to a mechanical resonator using quantum interference. *Nature Communications*, **2019**, 10, 5359	17.4	18
40	Synthesizing multi-phonon quantum superposition states using flux-mediated three-body interactions with superconducting qubits. *Npj Quantum Information*, **2019**, 5,	8.6	7

39	Nature of the Lamb shift in weakly anharmonic atoms: From normal-mode splitting to quantum fluctuations. *Physical Review A*, **2018**, 98,	2.6	8
38	Interaction-Driven Giant Orbital Magnetic Moments in Carbon Nanotubes. *Physical Review Letters*, **2018**, 121, 127704	7.4	3
37	A ballistic graphene superconducting microwave circuit. *Nature Communications*, **2018**, 9, 4069	17.4	22
36	Mechanical dissipation in MoRe superconducting metal drums. *Applied Physics Letters*, **2017**, 110, 083103	3.4	1
35	Giant modulation of the electronic band gap of carbon nanotubes by dielectric screening. *Scientific Reports*, **2017**, 7, 8828	4.9	13
34	Strong and tunable couplings in flux-mediated optomechanics. *Physical Review B*, **2017**, 96,	3.3	13
33	Multi-mode ultra-strong coupling in circuit quantum electrodynamics. *Npj Quantum Information*, **2017**, 3,	8.6	48
32	Negative nonlinear damping of a multilayer graphene mechanical resonator. *Physical Review B*, **2016**, 93,	3.3	28
31	Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. *2D Materials*, **2015**, 2, 015006	5.9	104
30	Quantum transport in carbon nanotubes. *Reviews of Modern Physics*, **2015**, 87, 703-764	40.5	229
29	Large cooperativity and microkelvin cooling with a three-dimensional optomechanical cavity. *Nature Communications*, **2015**, 6, 8491	17.4	63
28	Optomechanical response of a nonlinear mechanical resonator. *Physical Review B*, **2015**, 92,	3.3	6
27	Silicon nitride membrane resonators at millikelvin temperatures with quality factors exceeding 108. *Applied Physics Letters*, **2015**, 107, 263501	3.4	35
26	Broadband architecture for galvanically accessible superconducting microwave resonators. *Applied Physics Letters*, **2015**, 107, 192602	3.4	11
25	Folded MoS2 layers with reduced interlayer coupling. *Nano Research*, **2014**, 7, 572-578	10	55
24	The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS2. *Nano Research*, **2014**, 7, 561-571	10	392
23	Time-domain response of atomically thin MoS2 nanomechanical resonators. *Applied Physics Letters*, **2014**, 105, 041911	3.4	30
22	Optomechanical coupling between a multilayer graphene mechanical resonator and a superconducting microwave cavity. *Nature Nanotechnology*, **2014**, 9, 820-4	28.7	168

21	Identifying [corrected] signatures of photothermal current in a double-gated semiconducting nanotube. *Nature Communications*, **2014**, 5, 4987	17.4	10
20	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. *2D Materials*, **2014**, 1, 011002	5.9	986
19	Observation of decoherence in a carbon nanotube mechanical resonator. *Nature Communications*, **2014**, 5, 5819	17.4	31
18	Molybdenum-rhenium alloy based high-Q superconducting microwave resonators. *Applied Physics Letters*, **2014**, 105, 222601	3.4	27
17	Submicrosecond-timescale readout of carbon nanotube mechanical motion. *Applied Physics Letters*, **2013**, 103, 053121	3.4	8
16	Single-layer MoS(2) mechanical resonators. *Advanced Materials*, **2013**, 25, 6719-23	24	162
15	Large and tunable photothermoelectric effect in single-layer MoS2. *Nano Letters*, **2013**, 13, 358-63	11.5	480
14	Large spin-orbit coupling in carbon nanotubes. *Nature Communications*, **2013**, 4, 1573	17.4	97
13	Probing optical transitions in individual carbon nanotubes using polarized photocurrent spectroscopy. *Nano Letters*, **2012**, 12, 5649-53	11.5	32
12	Elastic properties of freely suspended MoS2 nanosheets. *Advanced Materials*, **2012**, 24, 772-5	24	725
11	A high quality factor carbon nanotube mechanical resonator at 39 GHz. *Nano Letters*, **2012**, 12, 193-7	11.5	84
10	Valley-spin blockade and spin resonance in carbon nanotubes. *Nature Nanotechnology*, **2012**, 7, 630-4	28.7	88
9	Laser-thinning of MoS□on demand generation of a single-layer semiconductor. *Nano Letters*, **2012**, 12, 3187-92	11.5	471
8	Strong and tunable mode coupling in carbon nanotube resonators. *Physical Review B*, **2012**, 86,	3.3	51
7	Coupling carbon nanotube mechanics to a superconducting circuit. *Scientific Reports*, **2012**, 2, 599	4.9	39
6	Probing the charge of a quantum dot with a nanomechanical resonator. *Physical Review B*, **2012**, 86,	3.3	43
5	Imaging the formation of a p-n junction in a suspended carbon nanotube with scanning photocurrent microscopy. *Journal of Applied Physics*, **2011**, 110, 074308	2.5	14
4	Single electron tunnelling through high-Q single-wall carbon nanotube NEMS resonators. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2974-2979	1.3	19

3	Tunable few-electron double quantum dots and Klein tunnelling in ultraclean carbon nanotubes. *Nature Nanotechnology*, **2009**, 4, 363-7	28.7	115
2	Strong coupling between single-electron tunneling and nanomechanical motion. *Science*, **2009**, 325, 1103-7	33.3	308
1	Carbon nanotubes as ultrahigh quality factor mechanical resonators. *Nano Letters*, **2009**, 9, 2547-52	11.5	280