Vibhor Singh

List of Publications by Year
in descending order

31 papers	2,550 citations	516710 16 h-index	477307 29 g-index
32 all docs	32 docs citations	32 times ranked	4743 citing authors

#	Article	IF	Citations
1	Superconducting Vortex-Charge Measurement Using Cavity Electromechanics. Nano Letters, 2022, 22, 1665-1671.	9.1	8
2	Large flux-mediated coupling in hybrid electromechanical system with a transmon qubit. Communications Physics, 2021, 4, .	5.3	16
3	Quantized conductance with nonzero shot noise as a signature of Andreev edge state. Physical Review B, 2021, 104, .	3.2	4
4	Coplanar cavity for strong coupling between photons and magnons in van der Waals antiferromagnet. Applied Physics Letters, 2020, 117, .	3.3	15
5	Elastic properties of few unit cell thick superconducting crystals of Bi2Sr2CaCu2O8+<i>Î´</i>. Applied Physics Letters, 2019, 115, .	3.3	3
6	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
7	Optomechanical Platform with a Three-dimensional Waveguide Cavity. Physical Review Applied, 2019, 11, .	3.8	5
8	Mechanical dissipation in MoRe superconducting metal drums. Applied Physics Letters, 2017, 110, 083103.	3.3	2
9	Approaching ultrastrong coupling in transmon circuit QED using a high-impedance resonator. Physical Review B, 2017, 95, .	3.2	24
10	Multi-mode ultra-strong coupling in circuit quantum electrodynamics. Npj Quantum Information, 2017, 3, .	6.7	69
11	Negative nonlinear damping of a multilayer graphene mechanical resonator. Physical Review B, 2016, 93, .	3.2	33
12	Broadband architecture for galvanically accessible superconducting microwave resonators. Applied Physics Letters, 2015, 107, 192602.	3.3	12
13	Large cooperativity and microkelvin cooling with a three-dimensional optomechanical cavity. Nature Communications, 2015, 6, 8491.	12.8	74
14	Mechanics of freelyâ€suspended ultrathin layered materials. Annalen Der Physik, 2015, 527, 27-44.	2.4	145
15	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. 2D Materials, 2014, 1, 011002.	4.4	1,375
16	Observation of decoherence in a carbon nanotube mechanical resonator. Nature Communications, 2014, 5, 5819.	12.8	38
17	Molybdenum-rhenium alloy based high-Q superconducting microwave resonators. Applied Physics Letters, 2014, 105, 222601.	3.3	35
18	Optomechanical coupling between a multilayer graphene mechanical resonator and a superconducting microwave cavity. Nature Nanotechnology, 2014, 9, 820-824.	31.5	217

#	Article	IF	Citations
19	Plasmon Mode Modifies the Elastic Response of a Nanoscale Charge Density Wave System. Physical Review Letters, 2013, 110, 166403.	7.8	6
20	Suspended Graphene Devices for Nanoelectromechanics and for the Study of Quantum Hall Effect. , 2012, , 197-209.		0
21	Coupling between quantum Hall state and electromechanics in suspended graphene resonator. Applied Physics Letters, 2012, 100, 233103.	3.3	29
22	Dual top gated graphene transistor in the quantum Hall regime. Solid State Communications, 2012, 152, 545-548.	1.9	6
23	Graphene â€" An exciting two-dimensional material for science and technology. Resonance, 2011, 16, 238-253.	0.3	9
24	Tunable thermal conductivity in defect engineered nanowires at low temperatures. Physical Review B, 2011, 84, .	3.2	31
25	High <i>Q</i> electromechanics with InAs nanowire quantum dots. Applied Physics Letters, 2011, 99, .	3.3	9
26	Tuning mechanical modes and influence of charge screening in nanowire resonators. Physical Review B, 2010, 81, .	3.2	39
27	Probing thermal expansion of graphene and modal dispersion at low-temperature using graphene nanoelectromechanical systems resonators. Nanotechnology, 2010, 21, 165204.	2.6	201
28	Electromechanical resonators as probes of the charge density wave transition at the nanoscale in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NbSe</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m Physical Review B, 2010, 82, .	3.2	34
29	Nonequilibrium breakdown of quantum Hall state in graphene. Physical Review B, 2009, 80, .	3.2	29
30	Magnetotransport properties of individual InAs nanowires. Physical Review B, 2009, 79, .	3.2	75
31	A Fast Tunable 3D-Transmon Architecture for Superconducting Qubit-Based Hybrid Devices. Journal of Low Temperature Physics, 0, , 1.	1.4	2