Vibhor Singh

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6726773/publications.pdf

Version: 2024-02-01

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	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. 2D Materials, 2014, 1, 011002.	4.4	1,375
2	Optomechanical coupling between a multilayer graphene mechanical resonator and a superconducting microwave cavity. Nature Nanotechnology, 2014, 9, 820-824.	31.5	217
3	Probing thermal expansion of graphene and modal dispersion at low-temperature using graphene nanoelectromechanical systems resonators. Nanotechnology, 2010, 21, 165204.	2.6	201
4	Mechanics of freelyâ€suspended ultrathin layered materials. Annalen Der Physik, 2015, 527, 27-44.	2.4	145
5	Magnetotransport properties of individual InAs nanowires. Physical Review B, 2009, 79, .	3.2	75
6	Large cooperativity and microkelvin cooling with a three-dimensional optomechanical cavity. Nature Communications, 2015, 6, 8491.	12.8	74
7	Multi-mode ultra-strong coupling in circuit quantum electrodynamics. Npj Quantum Information, 2017, 3, .	6.7	69
8	Tuning mechanical modes and influence of charge screening in nanowire resonators. Physical Review B, 2010, 81, .	3.2	39
9	Observation of decoherence in a carbon nanotube mechanical resonator. Nature Communications, 2014, 5, 5819.	12.8	38
10	Molybdenum-rhenium alloy based high-Q superconducting microwave resonators. Applied Physics Letters, 2014, 105, 222601.	3.3	35
11	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:msub></mml:mrow></mml:math>. Physical Review B, 2010, 82, .	3.2	34
12	Negative nonlinear damping of a multilayer graphene mechanical resonator. Physical Review B, 2016, 93, .	3.2	33
13	Tunable thermal conductivity in defect engineered nanowires at low temperatures. Physical Review B, 2011, 84, .	3.2	31
14	Nonequilibrium breakdown of quantum Hall state in graphene. Physical Review B, 2009, 80, .	3.2	29
15	Coupling between quantum Hall state and electromechanics in suspended graphene resonator. Applied Physics Letters, 2012, 100, 233103.	3.3	29
16	Approaching ultrastrong coupling in transmon circuit QED using a high-impedance resonator. Physical Review B, 2017, 95, .	3.2	24
17	Large flux-mediated coupling in hybrid electromechanical system with a transmon qubit. Communications Physics, 2021, 4, .	5.3	16
18	Coplanar cavity for strong coupling between photons and magnons in van der Waals antiferromagnet. Applied Physics Letters, 2020, 117, .	3.3	15

#	Article	IF	Citations
19	Broadband architecture for galvanically accessible superconducting microwave resonators. Applied Physics Letters, 2015, 107, 192602.	3.3	12
20	Graphene â€" An exciting two-dimensional material for science and technology. Resonance, 2011, 16, 238-253.	0.3	9
21	High Q electromechanics with InAs nanowire quantum dots. Applied Physics Letters, 2011, 99, .	3.3	9
22	Superconducting Vortex-Charge Measurement Using Cavity Electromechanics. Nano Letters, 2022, 22, 1665-1671.	9.1	8
23	Dual top gated graphene transistor in the quantum Hall regime. Solid State Communications, 2012, 152, 545-548.	1.9	6
24	Plasmon Mode Modifies the Elastic Response of a Nanoscale Charge Density Wave System. Physical Review Letters, 2013, 110, 166403.	7.8	6
25	Optomechanical Platform with a Three-dimensional Waveguide Cavity. Physical Review Applied, 2019, 11, .	3.8	5
26	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.	4.4	4
27	Quantized conductance with nonzero shot noise as a signature of Andreev edge state. Physical Review B, 2021, 104, .	3.2	4
28	Elastic properties of few unit cell thick superconducting crystals of Bi2Sr2CaCu2O8+Î´. Applied Physics Letters, 2019, 115, .	3.3	3
29	Mechanical dissipation in MoRe superconducting metal drums. Applied Physics Letters, 2017, 110, 083103.	3.3	2
30	A Fast Tunable 3D-Transmon Architecture for Superconducting Qubit-Based Hybrid Devices. Journal of Low Temperature Physics, 0, , 1.	1.4	2
31	Suspended Graphene Devices for Nanoelectromechanics and for the Study of Quantum Hall Effect. , 2012, , 197-209.		0