Mandar M Deshmukh

List of Publications by Year
in descending order

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60 papers	2,727 citations	218677 26 h-index	175258 52 g-index
60 all docs	60 docs citations	60 times ranked	4083 citing authors

#	Article	IF	Citations
1	Signatures of Molecular Magnetism in Single-Molecule Transport Spectroscopy. Nano Letters, 2006, 6, 2014-2020.	9.1	329
2	Schottky barrier heights for Au and Pd contacts to MoS2. Applied Physics Letters, 2014, 105, .	3.3	224
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	Nanofabrication using a stencil mask. Applied Physics Letters, 1999, 75, 1631-1633.	3.3	180
5	Dynamical strong coupling and parametric amplification of mechanical modes of graphene drums. Nature Nanotechnology, 2016, 11, 747-751.	31.5	139
6	Solving rate equations for electron tunneling via discrete quantum states. Physical Review B, 2002, 65, .	3.2	135
7	Tunneling via Individual Electronic States in Ferromagnetic Nanoparticles. Physical Review Letters, 1999, 83, 4148-4151.	7.8	117
8	Vapor-Phase Synthesis and Characterization of Îµ-FeSi Nanowires. Advanced Materials, 2006, 18, 1437-1440.	21.0	87
9	Tunable Superlattice in Graphene To Control the Number of Dirac Points. Nano Letters, 2013, 13, 3990-3995.	9.1	76
10	MOVPE growth of semipolar III-nitride semiconductors on CVD graphene. Journal of Crystal Growth, 2013, 372, 105-108.	1.5	76
11	A facile process for soak-and-peel delamination of CVD graphene from substrates using water. Scientific Reports, 2014, 4, 3882.	3.3	76
12	Magnetotransport properties of individual InAs nanowires. Physical Review B, 2009, 79, .	3.2	75
13	Using Single Quantum States as Spin Filters to Study Spin Polarization in Ferromagnets. Physical Review Letters, 2002, 89, 266803.	7.8	74
14	Field-effect modulation of conductance in VO2 nanobeam transistors with HfO2 as the gate dielectric. Applied Physics Letters, 2011, 99, .	3.3	70
15	Magnetic Anisotropy Variations and Nonequilibrium Tunneling in a Cobalt Nanoparticle. Physical Review Letters, 2001, 87, 226801.	7.8	57
16	Dense Electron System from Gate-Controlled Surface Metalâ€“Insulator Transition. Nano Letters, 2012, 12, 6272-6277.	9.1	57
17	Fabrication of Asymmetric Electrode Pairs with Nanometer Separation Made of Two Distinct Metals. Nano Letters, 2003, 3, 1383-1385.	9.1	56
18	Berry curvature dipole senses topological transition in a moirÃ© superlattice. Nature Physics, 2022, 18, 765-770.	16.7	51

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19	Carrier Transport in High Mobility InAs Nanowire Junctionless Transistors. Nano Letters, 2015, 15, 1684-1690.	9.1	44
20	Tuning mechanical modes and influence of charge screening in nanowire resonators. Physical Review B, 2010, 81, .	3.2	39
21	Model for ferromagnetic nanograins with discrete electronic states. Physical Review B, 2001, 64, .	3.2	37
22	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
23	Tunable thermal conductivity in defect engineered nanowires at low temperatures. Physical Review B, 2011, 84, .	3.2	31
24	Tunable bandwidths and gaps in twisted double bilayer graphene on the verge of correlations. Physical Review B, 2020, 101, .	3.2	31
25	Nonequilibrium breakdown of quantum Hall state in graphene. Physical Review B, 2009, 80, .	3.2	29
26	Coupling between quantum Hall state and electromechanics in suspended graphene resonator. Applied Physics Letters, 2012, 100, 233103.	3.3	29
27	Free-standing semipolar III-nitride quantum well structures grown on chemical vapor deposited graphene layers. Applied Physics Letters, 2013, 103, 181108.	3.3	25
28	Equilibrium and nonequilibrium electron tunneling via discrete quantum states. Physical Review B, 2002, 65, .	3.2	24
29	Strong electronic interaction and multiple quantum Hall ferromagnetic phases in trilayer graphene. Nature Communications, 2017, 8, 14518.	12.8	22
30	Bulk valley transport and Berry curvature spreading at the edge of flat bands. Nature Communications, 2020, 11, 5548.	12.8	21
31	Magnetic switching of phase-slip dissipation inNbSe2nanoribbons. Physical Review B, 2007, 75, .	3.2	20
32	Facile fabrication of lateral nanowire wrap-gate devices with improved performance. Applied Physics Letters, 2011, 99, .	3.3	18
33	Low tension graphene drums for electromechanical pressure sensing. 2D Materials, 2016, 3, 011003.	4.4	18
34	Nanoscale Electromechanics To Measure Thermal Conductivity, Expansion, and Interfacial Losses. Nano Letters, 2015, 15, 7621-7626.	9.1	17
35	Observation of Standing Spin Waves in a van der Waals Magnetic Material. Advanced Materials, 2021, 33, e2005105.	21.0	17
36	Wide Bandwidth Nanowire Electromechanics on Insulating Substrates at Room Temperature. Nano Letters, 2012, 12, 6432-6435.	9.1	16

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37	Dynamically Tracking the Strain Across the Metalâ€“Insulator Transition in VO₂ Measured Using Electromechanical Resonators. Nano Letters, 2013, 13, 4685-4689.	9.1	16
38	Coplanar cavity for strong coupling between photons and magnons in van der Waals antiferromagnet. Applied Physics Letters, 2020, 117, .	3.3	15
39	Light matter interaction in WS₂ nanotube-graphene hybrid devices. Applied Physics Letters, 2014, 105, 223502.	3.3	12
40	Onâ€Ðemand Local Modification of Highâ€‹i>T_c Superconductivity in Few Unitâ€€Cell Thick Bi₂Sr₂CaCu₂O_{8+Î´}. Advanced Materials, 2020, 32, e2002220.	21.0	11
41	Limits on the bolometric response of graphene due to flicker noise. Applied Physics Letters, 2015, 106, 051113.	3.3	10
42	Landau Level Diagram and the Continuous Rotational Symmetry Breaking in Trilayer Graphene. Physical Review Letters, 2018, 121, 056801.	7.8	10
43	Graphene â€" An exciting two-dimensional material for science and technology. Resonance, 2011, 16, 238-253.	0.3	9
44	High Q electromechanics with InAs nanowire quantum dots. Applied Physics Letters, 2011, 99, .	3.3	9
45	Fabrication and characterization of GaN nanowire doubly clamped resonators. Journal of Applied Physics, 2015, 118, .	2.5	9
46	Abrupt p-n junction using ionic gating at zero-bias in bilayer graphene. Scientific Reports, 2017, 7, 3336.	3.3	9
47	Growth of high-quality Bi2Sr2 CaCu2O8+Î´ whiskers and electrical properties of resulting exfoliated flakes. Scientific Reports, 2017, 7, 3295.	3.3	8
48	Superconducting Vortex-Charge Measurement Using Cavity Electromechanics. Nano Letters, 2022, 22, 1665-1671.	9.1	8
49	Nontrivial quantum oscillation geometric phase shift in a trivial band. Science Advances, 2019, 5, eaax6550.	10.3	7
50	Dual top gated graphene transistor in the quantum Hall regime. Solid State Communications, 2012, 152, 545-548.	1.9	6
51	Plasmon Mode Modifies the Elastic Response of a Nanoscale Charge Density Wave System. Physical Review Letters, 2013, 110, 166403.	7.8	6
52	Compact, inexpensive coaxial terminations and wiring for low temperature RF applications. Cryogenics, 2012, 52, 461-464.	1.7	5
53	Facile deterministic cutting of 2D materials for twistronics using a tapered fibre scalpel. Nanotechnology, 2020, 31, 32LT02.	2.6	5
54	Tension mediated nonlinear coupling between orthogonal mechanical modes of nanowire resonators. Solid State Communications, 2018, 282, 17-20.	1.9	4

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55	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
56	Dynamics of Interfacial Bubble Controls Adhesion Mechanics in Van der Waals Heterostructure. Nano Letters, 2022, 22, 3612-3619.	9.1	4
57	Tuning equilibration of quantum Hall edge states in graphene â€“ Role of crossed electric and magnetic fields. Solid State Communications, 2016, 237-238, 59-63.	1.9	3
58	Elastic properties of few unit cell thick superconducting crystals of Bi2Sr2CaCu2O8+Î´. Applied Physics Letters, 2019, 115, .	3.3	3
59	Nanoscale devices with superconducting electrodes to locally channel current in 3D Weyl semimetals. Applied Physics Letters, 2021, 119, 133501.	3.3	2
60	Suspended Graphene Devices for Nanoelectromechanics and for the Study of Quantum Hall Effect. , 2012, , 197-209.		0