Jin Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3519668/publications.pdf

Version: 2024-02-01

33 papers	906 citations	516710 16 h-index	454955 30 g-index
33 all docs	33 docs citations	33 times ranked	853 citing authors

#	Article	IF	Citations
1	Piezoelectric effects and electromechanical theories at the nanoscale. Nanoscale, 2014, 6, 13314-13327.	5.6	127
2	Size-dependent pull-in phenomena in electrically actuated nanobeams incorporating surface energies. Applied Mathematical Modelling, 2011, 35, 941-951.	4.2	116
3	Modeling and analysis of microtubules based on a modified couple stress theory. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1741-1745.	2.7	84
4	Influences of the surface energies on the nonlinear static and dynamic behaviors of nanobeams. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2268-2273.	2.7	84
5	On the piezoelectric potential of gallium nitride nanotubes. Nano Energy, 2015, 12, 322-330.	16.0	50
6	Piezoelectricity of 2D nanomaterials: characterization, properties, and applications. Semiconductor Science and Technology, 2017, 32, 043006.	2.0	49
7	On the piezopotential properties of two-dimensional materials. Nano Energy, 2019, 58, 568-578.	16.0	37
8	Size- and temperature-dependent piezoelectric properties of gallium nitride nanowires. Scripta Materialia, 2013, 68, 627-630.	5.2	36
9	Small-scale effect on the piezoelectric potential of gallium nitride nanowires. Applied Physics Letters, 2014, 104, .	3.3	35
10	Molecular structural mechanics model for the mechanical properties of microtubules. Biomechanics and Modeling in Mechanobiology, 2014, 13, 1175-1184.	2.8	31
11	Effect of surface energy on the dynamic response and instability of fluid-conveying nanobeams. European Journal of Mechanics, A/Solids, 2016, 58, 1-9.	3.7	27
12	Boron nitride honeycombs with superb and tunable piezopotential properties. Nano Energy, 2017, 41, 460-468.	16.0	25
13	Mechanical properties of hybrid boron nitrideâ€“carbon nanotubes. Journal Physics D: Applied Physics, 2016, 49, 155305.	2.8	23
14	Composition-dependent buckling behaviour of hybrid boron nitrideâ€“carbon nanotubes. Physical Chemistry Chemical Physics, 2015, 17, 12796-12803.	2.8	20
15	Molecular structure-dependent deformations in boron nitride nanostructures subject to an electrical field. Journal Physics D: Applied Physics, 2013, 46, 235303.	2.8	19
16	Beat vibration of hybrid boron nitride-carbon nanotubes â€“ A new avenue to atomic-scale mass sensing. Computational Materials Science, 2017, 127, 270-276.	3.0	19
17	Humidity-dependent piezopotential properties of zinc oxide nanowires: Insights from atomic-scale modelling. Nano Energy, 2018, 50, 298-307.	16.0	17
18	Free vibration analysis of microtubules based on the molecular mechanics and continuum beam theory. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1069-1078.	2.8	16

#	Article	IF	Citations
19	Buckling of microtubules: An insight by molecular and continuum mechanics. Applied Physics Letters, 2014, 105, 173704.	3.3	14
20	Size-dependent pyroelectric properties of gallium nitride nanowires. Journal of Applied Physics, 2016, 119, .	2.5	14
21	Elastocaloric effect on the piezoelectric potential of boron nitride nanotubes. Journal Physics D: Applied Physics, 2017, 50, 415308.	2.8	13
22	Small-scale effects on the piezopotential properties of tapered gallium nitride nanowires: The synergy between surface and flexoelectric effects. Nano Energy, 2021, 79, 105489.	16.0	11
23	Superior interfacial mechanical properties of boron nitride-carbon nanotube reinforced nanocomposites: A molecular dynamics study. Materials Chemistry and Physics, 2017, 198, 250-257.	4.0	9
24	Lattice mismatch induced curved configurations of hybrid boron nitrideâ€“carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 372-377.	2.7	7
25	On the piezotronic behaviours of wurtzite coreâ€“shell nanowires. Nanotechnology, 2020, 31, 095407.	2.6	6
26	Polycrystalline graphene curved by grain boundary for high performance nanoresonators. Computational Materials Science, 2014, 87, 26-33.	3.0	5
27	Tunable local and global piezopotential properties of graded InGaN nanowires. Nano Energy, 2021, 86, 106125.	16.0	4
28	Boundary condition-selective length dependence of the flexural rigidity of microtubules. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2167-2173.	2.1	3
29	Piezoelectrically tunable resonance properties of boron nitride nanotube based resonators. Journal of Applied Physics, 2018, 124, 055103.	2.5	3
30	Piezoelectric Response at Nanoscale. , 2016, , 41-76.		1
31	Phase transformation and its effect on the piezopotential in a bent zinc oxide nanowire. Nanotechnology, 2021, 32, 075404.	2.6	1
32	Flexoelectricity in composition-graded InGaN nanowires. Journal Physics D: Applied Physics, 2021, 54, 465101.	2.8	0
33	Fatigue and its effect on the piezopotential properties of gallium nitride nanowires. Nanotechnology, 2022, 33, 095401.	2.6	0