Pritiraj Mohanty

List of Publications by Year
in descending order

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47	2,040	257357	233338
papers	citations	24 h-index	45 g-index

48	48	48	2161
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coherent signal amplification in bistable nanomechanical oscillators by stochastic resonance. Nature, 2005, 437, 995-998.	13.7	254
2	Synchronized Oscillation in Coupled Nanomechanical Oscillators. Science, 2007, 316, 95-99.	6.0	222
3	Dissipation in nanoelectromechanical systems. Physics Reports, 2014, 534, 89-146.	10.3	198
4	A controllable nanomechanical memory element. Applied Physics Letters, 2004, 85, 3587-3589.	1.5	136
5	Silicon-based nanoelectronic field-effect pH sensor with local gate control. Applied Physics Letters, 2006, 89, 223512.	1.5	103
6	Evidence for Quantized Displacement in Macroscopic Nanomechanical Oscillators. Physical Review Letters, 2005, 94, 030402.	2.9	94
7	Nanomechanical detection of itinerant electron spin flip. Nature Nanotechnology, 2008, 3, 720-723.	15.6	81
8	High quality factor gigahertz frequencies in nanomechanical diamond resonators. Applied Physics Letters, 2007, 91, .	1.5	79
9	A Nanomechanical Fredkin Gate. Nano Letters, 2014, 14, 89-93.	4.5	78
10	Dynamical Response of Nanomechanical Oscillators in Immiscible Viscous Fluid forInÂVitroBiomolecular Recognition. Physical Review Letters, 2006, 96, 186105.	2.9	59
11	Quantum friction in nanomechanical oscillators at millikelvin temperatures. Physical Review B, 2005, 72, .	1.1	51
12	Silicon-based nanochannel glucose sensor. Applied Physics Letters, 2008, 92, 013903.	1.5	48
13	Electrostatically actuated silicon-based nanomechanical switch at room temperature. Applied Physics Letters, 2008, 93, .	1.5	47
14	Nonlinear dissipation in diamond nanoelectromechanical resonators. Applied Physics Letters, 2013, 102, .	1.5	43
15	Scaling of dissipation in megahertz-range micromechanical diamond oscillators. Applied Physics Letters, 2007, 90, 173502.	1.5	42
16	Energy dissipation in suspended micromechanical resonators at low temperatures. Physica B: Condensed Matter, 2000, 284-288, 2145-2146.	1.3	36
17	Anomalous Conductance Distribution in Quasi-One-Dimensional Gold Wires: Possible Violation of the One-Parameter Scaling Hypothesis. Physical Review Letters, 2002, 88, 146601.	2.9	35
18	Observation of Nonlinear Dissipation in Piezoresistive Diamond Nanomechanical Resonators by Heterodyne Down-Mixing. Nano Letters, 2013, 13, 4014-4019.	4.5	34

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19	Surface-modified silicon nano-channel for urea sensing. Sensors and Actuators B: Chemical, 2008, 133, 593-598.	4.0	32
20	Evidence of universality in the dynamical response of micromechanical diamond resonators at millikelvin temperatures. Physical Review B, 2009, 79, .	1.1	31
21	Quantum Friction of Micromechanical Resonators at Low Temperatures. Physical Review Letters, 2003, 90, 085504.	2.9	29
22	Autoassociative Memory and Pattern Recognition in Micromechanical Oscillator Network. Scientific Reports, 2017, 7, 411.	1.6	27
23	Notes on decoherence at absolute zero. Physica B: Condensed Matter, 2000, 280, 446-452.	1.3	26
24	Temperature dependence of a nanomechanical switch. Applied Physics Letters, 2005, 86, 023106.	1.5	25
25	Spectral response of a gigahertz-range nanomechanical oscillator. Applied Physics Letters, 2005, 86, 254103.	1.5	24
26	Electron coherence at low temperatures: The role of magnetic impurities. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 40, 12-24.	1.3	24
27	Measurement of small forces in micron-sized resonators. Physica B: Condensed Matter, 2000, 284-288, 2143-2144.	1.3	23
28	Signal Amplification by 1/f Noise in Silicon-Based Nanomechanical Resonators. Nano Letters, 2009, 9, 3096-3099.	4.5	21
29	Micromechanical resonators fabricated from lattice-matched and etch-selective GaAsâˆ•InGaPâˆ•GaAs heterostructures. Applied Physics Letters, 2007, 91, 133505.	1.5	19
30	Nanoscale field effect transistor for biomolecular signal amplification. Applied Physics Letters, 2007, 91, 243511.	1.5	16
31	Anharmonic modal coupling in a bulk micromechanical resonator. Applied Physics Letters, 2010, 97, 123109.	1.5	13
32	Energy measurement in nonlinearly coupled nanomechanical modes. Applied Physics Letters, 2011, 98, 264106.	1.5	12
33	Sensing of the Melanoma Biomarker TROY Using Silicon Nanowire Field-Effect Transistors. ACS Sensors, 2016, 1, 696-701.	4.0	12
34	Nanoelectronic detection of breast cancer biomarker. Applied Physics Letters, 2010, 97, 233702.	1.5	11
35	Optical wireless information transfer with nonlinear micromechanical resonators. Microsystems and Nanoengineering, 2017, 3, 17026.	3.4	8
36	Micromechanical Resonator Driven by Radiation Pressure Force. Scientific Reports, 2017, 7, 16056.	1.6	8

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37	Tunable nanowire Wheatstone bridge for improved sensitivity in molecular recognition. Applied Physics Letters, 2013, 102, .	1.5	7
38	Dephasing of electrons by two-level defects in quantum dots. Physical Review B, 2001, 63, .	1.1	6
39	Wireless actuation of micromechanical resonators. Microsystems and Nanoengineering, 2016, 2, 16036.	3.4	6
40	Micromechanical resonator with dielectric nonlinearity. Microsystems and Nanoengineering, 2018, 4, 14.	3.4	5
41	Wireless actuation of bulk acoustic modes in micromechanical resonators. Applied Physics Letters, 2016, 109, 073502.	1.5	4
42	Micromechanical microphone using sideband modulation of nonlinear resonators. Applied Physics Letters, 2017, 111, .	1.5	3
43	Measurement of Aharonov-Bohm oscillations in mesoscopic metallic rings in the presence of a high-frequency electromagnetic field. Physical Review B, 2008, 77, .	1.1	2
44	Nanoelectromechanical system-integrated detector with silicon nanomechanical resonator and silicon nanochannel field effect transistor. Journal of Applied Physics, 2009, 105, 094308.	1.1	2
45	CHAPTER 17. Diamond Nano-electromechanical Systems. RSC Nanoscience and Nanotechnology, 2014, , 411-447.	0.2	2
46	Measurement of nonlinear piezoelectric coefficients using a micromechanical resonator. Applied Physics Letters, 2018, 113, 083501.	1.5	1
47	Quantum Nanomechanics. Understanding Complex Systems, 2009, , 25-36.	0.3	0