# Pritiraj Mohanty

List of Publications by Year
in descending order



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|---|---|---|---|
| 47 papers | 2,040 citations | 293460 24 h-index | 263392 45 g-index |
| 48 all docs | 48 docs citations | 48 times ranked | 2471 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 1 | Measurement of nonlinear piezoelectric coefficients using a micromechanical resonator. Applied Physics Letters, 2018, 113, 083501. | 1.5 | 1 |
| 2 | Micromechanical resonator with dielectric nonlinearity. Microsystems and Nanoengineering, 2018, 4, 14. | 3.4 | 5 |
| 3 | Autoassociative Memory and Pattern Recognition in Micromechanical Oscillator Network. Scientific Reports, 2017, 7, 411. | 1.6 | 27 |
| 4 | Micromechanical microphone using sideband modulation of nonlinear resonators. Applied Physics Letters, 2017, 111, . | 1.5 | 3 |
| 5 | Optical wireless information transfer with nonlinear micromechanical resonators. Microsystems and Nanoengineering, 2017, 3, 17026. | 3.4 | 8 |
| 6 | Micromechanical Resonator Driven by Radiation Pressure Force. Scientific Reports, 2017, 7, 16056. | 1.6 | 8 |
| 7 | Wireless actuation of bulk acoustic modes in micromechanical resonators. Applied Physics Letters, 2016, 109, 073502. | 1.5 | 4 |
| 8 | Sensing of the Melanoma Biomarker TROY Using Silicon Nanowire Field-Effect Transistors. ACS Sensors, 2016, 1, 696-701. | 4.0 | 12 |
| 9 | Wireless actuation of micromechanical resonators. Microsystems and Nanoengineering, 2016, 2, 16036. | 3.4 | 6 |
| 10 | Dissipation in nanoelectromechanical systems. Physics Reports, 2014, 534, 89-146. | 10.3 | 198 |
| 11 | A Nanomechanical Fredkin Gate. Nano Letters, 2014, 14, 89-93. | 4.5 | 78 |
| 12 | CHAPTER 17. Diamond Nano-electromechanical Systems. RSC Nanoscience and Nanotechnology, 2014, , 411-447. | 0.2 | 2 |
| 13 | Observation of Nonlinear Dissipation in Piezoresistive Diamond Nanomechanical Resonators by Heterodyne Down-Mixing. Nano Letters, 2013, 13, 4014-4019. | 4.5 | 34 |
| 14 | Nonlinear dissipation in diamond nanoelectromechanical resonators. Applied Physics Letters, 2013, 102, . | 1.5 | 43 |
| 15 | Tunable nanowire Wheatstone bridge for improved sensitivity in molecular recognition. Applied Physics Letters, 2013, 102, . | 1.5 | 7 |
| 16 | Energy measurement in nonlinearly coupled nanomechanical modes. Applied Physics Letters, 2011, 98, 264106. | 1.5 | 12 |
| 17 | Anharmonic modal coupling in a bulk micromechanical resonator. Applied Physics Letters, 2010, 97, 123109. | 1.5 | 13 |
| 18 | Nanoelectronic detection of breast cancer biomarker. Applied Physics Letters, 2010, 97, 233702. | 1.5 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Evidence of universality in the dynamical response of micromechanical diamond resonators at millikelvin temperatures. Physical Review B, 2009, 79, . | 1.1 | 31 |
| 20 | Nanoelectromechanical system-integrated detector with silicon nanomechanical resonator and silicon nanochannel field effect transistor. Journal of Applied Physics, 2009, 105, 094308. | 1.1 | 2 |
| 21 | Signal Amplification by 1/<i>f</i> Noise in Silicon-Based Nanomechanical Resonators. Nano Letters, 2009, 9, 3096-3099. | 4.5 | 21 |
| 22 | Quantum Nanomechanics. Understanding Complex Systems, 2009, , 25-36. | 0.3 | 0 |
| 23 | Surface-modified silicon nano-channel for urea sensing. Sensors and Actuators B: Chemical, 2008, 133, 593-598. | 4.0 | 32 |
| 24 | Nanomechanical detection of itinerant electron spin flip. Nature Nanotechnology, 2008, 3, 720-723. | 15.6 | 81 |
| 25 | Electrostatically actuated silicon-based nanomechanical switch at room temperature. Applied Physics Letters, 2008, 93, . | 1.5 | 47 |
| 26 | Silicon-based nanochannel glucose sensor. Applied Physics Letters, 2008, 92, 013903. | 1.5 | 48 |
| 27 | 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 |
| 28 | Scaling of dissipation in megahertz-range micromechanical diamond oscillators. Applied Physics Letters, 2007, 90, 173502. | 1.5 | 42 |
| 29 | Nanoscale field effect transistor for biomolecular signal amplification. Applied Physics Letters, 2007, 91, 243511. | 1.5 | 16 |
| 30 | Synchronized Oscillation in Coupled Nanomechanical Oscillators. Science, 2007, 316, 95-99. | 6.0 | 222 |
| 31 | High quality factor gigahertz frequencies in nanomechanical diamond resonators. Applied Physics Letters, 2007, 91, . | 1.5 | 79 |
| 32 | Micromechanical resonators fabricated from lattice-matched and etch-selective GaAsâˆ•InGaPâˆ•GaAs heterostructures. Applied Physics Letters, 2007, 91, 133505. | 1.5 | 19 |
| 33 | Electron coherence at low temperatures: The role of magnetic impurities. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 40, 12-24. | 1.3 | 24 |
| 34 | Silicon-based nanoelectronic field-effect pH sensor with local gate control. Applied Physics Letters, 2006, 89, 223512. | 1.5 | 103 |
| 35 | Dynamical Response of Nanomechanical Oscillators in Immiscible Viscous Fluid forInÂVitroBiomolecular Recognition. Physical Review Letters, 2006, 96, 186105. | 2.9 | 59 |
| 36 | Coherent signal amplification in bistable nanomechanical oscillators by stochastic resonance. Nature, 2005, 437, 995-998. | 13.7 | 254 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Quantum friction in nanomechanical oscillators at millikelvin temperatures. Physical Review B, 2005, 72, . | 1.1 | 51 |
| 38 | Temperature dependence of a nanomechanical switch. Applied Physics Letters, 2005, 86, 023106. | 1.5 | 25 |
| 39 | Spectral response of a gigahertz-range nanomechanical oscillator. Applied Physics Letters, 2005, 86, 254103. | 1.5 | 24 |
| 40 | Evidence for Quantized Displacement in Macroscopic Nanomechanical Oscillators. Physical Review Letters, 2005, 94, 030402. | 2.9 | 94 |
| 41 | A controllable nanomechanical memory element. Applied Physics Letters, 2004, 85, 3587-3589. | 1.5 | 136 |
| 42 | Quantum Friction of Micromechanical Resonators at Low Temperatures. Physical Review Letters, 2003, 90, 085504. | 2.9 | 29 |
| 43 | 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 |
| 44 | Dephasing of electrons by two-level defects in quantum dots. Physical Review B, 2001, 63, . | 1.1 | 6 |
| 45 | Notes on decoherence at absolute zero. Physica B: Condensed Matter, 2000, 280, 446-452. | 1.3 | 26 |
| 46 | Measurement of small forces in micron-sized resonators. Physica B: Condensed Matter, 2000, 284-288, 2143-2144. | 1.3 | 23 |
| 47 | Energy dissipation in suspended micromechanical resonators at low temperatures. Physica B: Condensed Matter, 2000, 284-288, 2145-2146. | 1.3 | 36 |