

Robert H Blick

List of Publications by Year in descending order

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217
papers

5,838
citations

94269

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88477

70
g-index

220
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220
docs citations

220
times ranked

5109
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Giant Piezoelectricity on Si for Hyperactive MEMS. <i>Science</i> , 2011, 334, 958-961. | 6.0 | 394 |
| 2 | Whole Cell Patch Clamp Recording Performed on a Planar Glass Chip. <i>Biophysical Journal</i> , 2002, 82, 3056-3062. | 0.2 | 344 |
| 3 | Coherent Coupling of Two Quantum Dots Embedded in an Aharonov-Bohm Interferometer. <i>Physical Review Letters</i> , 2001, 87, 256802. | 2.9 | 299 |
| 4 | Anomalous Kondo Effect in a Quantum Dot at Nonzero Bias. <i>Physical Review Letters</i> , 1999, 83, 804-807. | 2.9 | 228 |
| 5 | Probing and Controlling the Bonds of an Artificial Molecule. <i>Science</i> , 2002, 297, 70-72. | 6.0 | 224 |
| 6 | Formation of a Coherent Mode in a Double Quantum Dot. <i>Physical Review Letters</i> , 1998, 80, 4032-4035. | 2.9 | 217 |
| 7 | Single-electron tunneling through a double quantum dot: The artificial molecule. <i>Physical Review B</i> , 1996, 53, 7899-7902. | 1.1 | 168 |
| 8 | Nanomechanical Architecture of Strained Bilayer Thin Films: From Design Principles to Experimental Fabrication. <i>Advanced Materials</i> , 2005, 17, 2860-2864. | 11.1 | 167 |
| 9 | Electrical characterization of electrochemically grown single copper nanowires. <i>Applied Physics Letters</i> , 2003, 82, 2139-2141. | 1.5 | 164 |
| 10 | Spin blockade and lifetime-enhanced transport in a few-electron Si/SiGe double quantum dot. <i>Nature Physics</i> , 2008, 4, 540-544. | 6.5 | 148 |
| 11 | Magnetic Focusing of Composite Fermions through Arrays of Cavities. <i>Physical Review Letters</i> , 1996, 77, 2272-2275. | 2.9 | 127 |
| 12 | Photon-assisted tunneling through a quantum dot at high microwave frequencies. <i>Applied Physics Letters</i> , 1995, 67, 3924-3926. | 1.5 | 126 |
| 13 | Quantum-dot ground states in a magnetic field studied by single-electron tunneling spectroscopy on double-barrier heterostructures. <i>Physical Review B</i> , 1995, 51, 5570-5573. | 1.1 | 114 |
| 14 | Activity of single ion channel proteins detected with a planar microstructure. <i>Applied Physics Letters</i> , 2002, 81, 4865-4867. | 1.5 | 109 |
| 15 | Silicon nanopillars for mechanical single-electron transport. <i>Applied Physics Letters</i> , 2004, 84, 4632-4634. | 1.5 | 97 |
| 16 | Complex Broadband Millimeter Wave Response of a Double Quantum Dot: Rabi Oscillations in an Artificial Molecule. <i>Physical Review Letters</i> , 1998, 81, 689-692. | 2.9 | 92 |
| 17 | Semiconductor Nanomembrane Tubes: Three-Dimensional Confinement for Controlled Neurite Outgrowth. <i>ACS Nano</i> , 2011, 5, 2447-2457. | 7.3 | 85 |
| 18 | Mechanical mixing in nonlinear nanomechanical resonators. <i>Applied Physics Letters</i> , 2000, 77, 3102-3104. | 1.5 | 83 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Nanomechanical resonators operating as charge detectors in the nonlinear regime. Europhysics Letters, 2000, 50, 101-106. | 0.7 | 74 |
| 20 | Stable integration of isolated cell membrane patches in a nanomachined aperture. Applied Physics Letters, 2000, 77, 1218-1220. | 1.5 | 73 |
| 21 | Single-electron quantum dot in Si ⁺ -SiGe with integrated charge sensing. Applied Physics Letters, 2007, 91, . | 1.5 | 72 |
| 22 | A mechanically flexible tunneling contact operating at radio frequencies. Applied Physics Letters, 1998, 73, 3751-3753. | 1.5 | 71 |
| 23 | Coulomb blockade in quasimetallic silicon-on-insulator nanowires. Applied Physics Letters, 1999, 75, 3704-3706. | 1.5 | 62 |
| 24 | X-ray-Based Techniques to Study the Nano-Bio Interface. ACS Nano, 2021, 15, 3754-3807. | 7.3 | 60 |
| 25 | Coulomb blockade in silicon nanostructures. Progress in Quantum Electronics, 2001, 25, 97-138. | 3.5 | 59 |
| 26 | Fabrication and contacting of single Bi nanowires. Nanotechnology, 2004, 15, S201-S207. | 1.3 | 56 |
| 27 | Coulomb blockade in a silicon/silicon-germanium two-dimensional electron gas quantum dot. Applied Physics Letters, 2004, 84, 4047-4049. | 1.5 | 55 |
| 28 | Josephson junctions defined by a nanoplough. Applied Physics Letters, 1998, 73, 2051-2053. | 1.5 | 54 |
| 29 | On geometric potentials in quantum-electromechanical circuits. New Journal of Physics, 2004, 6, 33-33. | 1.2 | 47 |
| 30 | Evidence of a nanomechanical resonator being driven into chaotic response via the Ruelle-Takens route. Applied Physics Letters, 2002, 81, 1884-1886. | 1.5 | 44 |
| 31 | Nanostructured silicon for studying fundamental aspects of nanomechanics. Journal of Physics Condensed Matter, 2002, 14, R905-R945. | 0.7 | 44 |
| 32 | Toward Brain-on-a-Chip: Human Induced Pluripotent Stem Cell-Derived Guided Neuronal Networks in Tailor-Made 3D Nanoprinted Microscaffolds. ACS Nano, 2020, 14, 13091-13102. | 7.3 | 44 |
| 33 | A nanomechanical computer—exploring new avenues of computing. New Journal of Physics, 2007, 9, 241-241. | 1.2 | 43 |
| 34 | Single-electron tunneling in highly doped silicon nanowires in a dual-gate configuration. Journal of Applied Physics, 2001, 89, 8159-8162. | 1.1 | 41 |
| 35 | Periodic Field Emission from an Isolated Nanoscale Electron Island. Physical Review Letters, 2004, 93, 186801. | 2.9 | 40 |
| 36 | A Mechanical Nanomembrane Detector for Time-of-Flight Mass Spectrometry. Nano Letters, 2011, 11, 3681-3684. | 4.5 | 39 |

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|----|--|------|-----------|
| 37 | Suspending highly doped silicon-on-insulator wires for applications in nanomechanics. <i>Nanotechnology</i> , 1999, 10, 418-420. | 1.3 | 38 |
| 38 | Fabrication of coupled quantum dots for multiport access. <i>Applied Physics Letters</i> , 2003, 82, 1887-1889. | 1.5 | 37 |
| 39 | Integrating suspended quantum dot circuits for applications in nanomechanics. <i>Applied Physics Letters</i> , 2002, 81, 280-282. | 1.5 | 36 |
| 40 | Spin blockade in ground-state resonance of a quantum dot. <i>Europhysics Letters</i> , 2003, 62, 712-718. | 0.7 | 36 |
| 41 | Magnetotransport measurements on freely suspended two-dimensional electron gases. <i>Physical Review B</i> , 2000, 62, 17103-17107. | 1.1 | 31 |
| 42 | Nanoscale Lateral Field-Emission Triode Operating at Atmospheric Pressure. <i>Advanced Materials</i> , 2001, 13, 1780-1783. | 11.1 | 31 |
| 43 | Electron-phonon interaction in suspended highly doped silicon nanowires. <i>Nanotechnology</i> , 2002, 13, 491-494. | 1.3 | 31 |
| 44 | Tunable coupled nanomechanical resonators for single-electron transport. <i>New Journal of Physics</i> , 2002, 4, 86-86. | 1.2 | 30 |
| 45 | Time-Resolved Analysis of the Structural Dynamics of Assembling Gold Nanoparticles. <i>ACS Nano</i> , 2019, 13, 6596-6604. | 7.3 | 30 |
| 46 | Quantum dots in Si/SiGe 2DEGs with Schottky top-gated leads. <i>New Journal of Physics</i> , 2005, 7, 246-246. | 1.2 | 28 |
| 47 | Magnetotransport through two dimensional electron gas in a tubular geometry. <i>Applied Physics Letters</i> , 2007, 90, 042101. | 1.5 | 28 |
| 48 | Coulomb Blockade in a Coupled Nanomechanical Electron Shuttle. <i>ACS Nano</i> , 2012, 6, 651-655. | 7.3 | 28 |
| 49 | Colloidal quantum dots initiating current bursts in lipid bilayers. <i>Biosensors and Bioelectronics</i> , 2005, 20, 2173-2176. | 5.3 | 26 |
| 50 | Spontaneous Symmetry Breaking in Two Coupled Nanomechanical Electron Shuttles. <i>Physical Review Letters</i> , 2010, 105, 067204. | 2.9 | 26 |
| 51 | Phonon-Assisted Field Emission in Silicon Nanomembranes for Time-of-Flight Mass Spectrometry of Proteins. <i>Nano Letters</i> , 2013, 13, 2698-2703. | 4.5 | 25 |
| 52 | Bonding silicon-on-insulator to glass wafers for integrated bio-electronic circuits. <i>Applied Physics Letters</i> , 2004, 85, 2370-2372. | 1.5 | 24 |
| 53 | Harnessing Slow Light in Optoelectronically Engineered Nanoporous Photonic Crystals for Visible Light-Enhanced Photocatalysis. <i>ACS Catalysis</i> , 2021, 11, 12947-12962. | 5.5 | 24 |
| 54 | Laser drilling of nano-pores in sandwiched thin glass membranes. <i>Optics Express</i> , 2009, 17, 10044. | 1.7 | 23 |

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|----|---|-----|-----------|
| 55 | Pauli spin blockade and lifetime-enhanced transport in a Si/SiGe double quantum dot. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 23 |
| 56 | Microscaffolds by Direct Laser Writing for Neurite Guidance Leading to Tailor-Made Neuronal Networks. <i>Advanced Biology</i> , 2019, 3, e1800329. | 3.0 | 23 |
| 57 | Microfluidic polyimide gas dynamic virtual nozzles for serial crystallography. <i>Review of Scientific Instruments</i> , 2020, 91, 085108. | 0.6 | 22 |
| 58 | Sculpturing wafer-scale nanofluidic devices for DNA single molecule analysis. <i>Nanoscale</i> , 2019, 11, 13620-13631. | 2.8 | 21 |
| 59 | Mechanical gating of coupled nanoelectromechanical resonators operating at radio frequency. <i>Applied Physics Letters</i> , 2003, 82, 352-354. | 1.5 | 20 |
| 60 | Charge detection with nanomechanical resonators. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 6, 821-827. | 1.3 | 19 |
| 61 | Ultra-fast cell counters based on microtubular waveguides. <i>Scientific Reports</i> , 2017, 7, 41584. | 1.6 | 19 |
| 62 | Electron-spin resonance in a quantum dot. <i>Physical Review B</i> , 1998, 57, R12685-R12688. | 1.1 | 18 |
| 63 | Photonic materials for high-temperature applications: Synthesis and characterization by X-ray ptychographic tomography. <i>Applied Materials Today</i> , 2018, 13, 359-369. | 2.3 | 18 |
| 64 | Electrochemical Engineering of Nanoporous Materials for Photocatalysis: Fundamentals, Advances, and Perspectives. <i>Catalysts</i> , 2019, 9, 988. | 1.6 | 18 |
| 65 | In situ control of electron gas dimensionality in freely suspended semiconductor membranes. <i>Applied Physics Letters</i> , 2003, 82, 4160-4162. | 1.5 | 17 |
| 66 | Direct mechanical mixing in a nanoelectromechanical diode. <i>Applied Physics Letters</i> , 2007, 91, 143101. | 1.5 | 17 |
| 67 | Self-excitation of single nanomechanical pillars. <i>New Journal of Physics</i> , 2010, 12, 033008. | 1.2 | 17 |
| 68 | Coulomb-Controlled Single Electron Field Emission via a Freely Suspended Metallic Island. <i>Nano Letters</i> , 2010, 10, 615-619. | 4.5 | 17 |
| 69 | Realizing Broadbands of Strong Nonlinear Coupling in Nanoelectromechanical Electron Shuttles. <i>Physical Review Letters</i> , 2013, 111, 197202. | 2.9 | 17 |
| 70 | Understanding the Growth Mechanisms of Multilayered Systems in Atomic Layer Deposition Process. <i>Chemistry of Materials</i> , 2018, 30, 1971-1979. | 3.2 | 17 |
| 71 | Nanomechanical vibrating wire resonator for phonon spectroscopy in liquid helium. <i>Nanotechnology</i> , 2000, 11, 165-168. | 1.3 | 16 |
| 72 | Parametric frequency tuning of phase-locked nanoelectromechanical resonators. <i>Applied Physics Letters</i> , 2001, 79, 3521-3523. | 1.5 | 16 |

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|----|--|------|-----------|
| 73 | Phase coherent transport in two coupled quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 76-82. | 1.3 | 16 |
| 74 | Guided neuronal growth on arrays of biofunctionalized GaAs/InGaAs semiconductor microtubes. <i>Applied Physics Letters</i> , 2013, 103, . | 1.5 | 16 |
| 75 | Upscaling high-quality CVD graphene devices to 100 micron-scale and beyond. <i>Applied Physics Letters</i> , 2017, 110, . | 1.5 | 16 |
| 76 | Investigation of nano-electromechanical-systems using surface acoustic waves. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 13, 473-476. | 1.3 | 15 |
| 77 | Fabrication and transport characterization of a primary thermometer formed by Coulomb islands in a suspended silicon nanowire. <i>Applied Physics Letters</i> , 2003, 82, 3773-3775. | 1.5 | 15 |
| 78 | Current bursts in lipid bilayers initiated by colloidal quantum dots. <i>Applied Physics Letters</i> , 2005, 86, 083901. | 1.5 | 15 |
| 79 | Broadband characterization of charge carrier transfer of hybrid graphene-deoxyribonucleic acid junctions. <i>Carbon</i> , 2018, 130, 525-531. | 5.4 | 15 |
| 80 | The Nanomechanical Bit. <i>Small</i> , 2020, 16, e2001580. | 5.2 | 15 |
| 81 | Interfacing human induced pluripotent stem cell-derived neurons with designed nanowire arrays as a future platform for medical applications. <i>Biomaterials Science</i> , 2020, 8, 2434-2446. | 2.6 | 15 |
| 82 | A "bed of nails"™ on silicon. <i>Nature</i> , 2004, 432, 450-451. | 13.7 | 14 |
| 83 | Field emission from a single nanomechanical pillar. <i>Nanotechnology</i> , 2007, 18, 065201. | 1.3 | 14 |
| 84 | Shock Waves in Nanomechanical Resonators. <i>Physical Review Letters</i> , 2008, 100, 026801. | 2.9 | 14 |
| 85 | Strain-induced Dirac state shift in topological insulator Bi ₂ Se ₃ nanowires. <i>Applied Physics Letters</i> , 2017, 111, 171601. | 1.5 | 14 |
| 86 | Single-neuronal cell culture and monitoring platform using a fully transparent microfluidic DEP device. <i>Scientific Reports</i> , 2018, 8, 13194. | 1.6 | 14 |
| 87 | 3D Micromachined Polyimide Mixing Devices for in Situ X-ray Imaging of Solution-Based Block Copolymer Phase Transitions. <i>Langmuir</i> , 2019, 35, 10435-10445. | 1.6 | 14 |
| 88 | Formation of microtubes from strained SiGe/Si heterostructures. <i>New Journal of Physics</i> , 2005, 7, 241-241. | 1.2 | 13 |
| 89 | Mechanical actuation of ion channels using a piezoelectric planar patch clamp system. <i>Lab on A Chip</i> , 2012, 12, 80-87. | 3.1 | 13 |
| 90 | Fabrication and integration possibilities of ultrasmall quantum dots in silicon-on-insulator material. <i>Journal of Applied Physics</i> , 2001, 90, 942-946. | 1.1 | 12 |

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|-----|--|-----|-----------|
| 91 | Magnetotransport in Nonplanar SiGe/Si Nanomembranes. IEEE Nanotechnology Magazine, 2007, 6, 446-450. | 1.1 | 12 |
| 92 | Nanopillar arrays on semiconductor membranes as electron emission amplifiers. Nanotechnology, 2008, 19, 095504. | 1.3 | 12 |
| 93 | Low-Temperature Mullite Formation in Ternary Oxide Coatings Deposited by ALD for High-Temperature Applications. Advanced Materials Interfaces, 2017, 4, 1700912. | 1.9 | 12 |
| 94 | Tank Circuit for Ultrafast Single-Particle Detection in Micropores. Physical Review Letters, 2018, 121, 078102. | 2.9 | 12 |
| 95 | Acoustically Induced Giant Synthetic Hall Voltages in Graphene. Physical Review Letters, 2022, 128, . | 2.9 | 12 |
| 96 | Dynamic control and modal analysis of coupled nano-mechanical resonators. Applied Physics Letters, 2003, 82, 3333-3335. | 1.5 | 11 |
| 97 | Effects of low attenuation in a nanomechanical electron shuttle. Journal of Applied Physics, 2004, 96, 1757-1759. | 1.1 | 11 |
| 98 | Observation of single-defect relaxation in a freely suspended nano resonator. Europhysics Letters, 2006, 76, 1207-1213. | 0.7 | 11 |
| 99 | Single-Ion Channel Recordings on Quartz Substrates. IEEE Transactions on Nanobioscience, 2010, 9, 307-309. | 2.2 | 11 |
| 100 | Quasi-dynamic mode of nanomembranes for time-of-flight mass spectrometry of proteins. Nanoscale, 2012, 4, 2543. | 2.8 | 11 |
| 101 | Designer Neural Networks with Embedded Semiconductor Microtube Arrays. Langmuir, 2018, 34, 1528-1534. | 1.6 | 11 |
| 102 | Resonant Tunneling Induced Enhancement of Electron Field Emission by Ultra-Thin Coatings. Scientific Reports, 2019, 9, 6840. | 1.6 | 11 |
| 103 | Microwave spectroscopy on a double quantum dot with an on-chip Josephson oscillator. New Journal of Physics, 2000, 2, 2-2. | 1.2 | 10 |
| 104 | Radio frequency rectification on membrane bound pores. Nanotechnology, 2010, 21, 075201. | 1.3 | 10 |
| 105 | Approaching Integrated Hybrid Neural Circuits: Axon Guiding on Optically Active Semiconductor Microtube Arrays. Advanced Materials Interfaces, 2016, 3, 1600746. | 1.9 | 10 |
| 106 | Effects of processing parameters on 3D structural ordering and optical properties of inverse opal photonic crystals produced by atomic layer deposition. International Journal of Ceramic Engineering & Science, 2019, 1, 68-76. | 0.5 | 10 |
| 107 | Direct writing of colloidal suspensions onto inclined surfaces: Optimizing dispense volume for homogeneous structures. Journal of Colloid and Interface Science, 2021, 597, 137-148. | 5.0 | 10 |
| 108 | Sound propagation in heavy fermion compounds. Journal of Magnetism and Magnetic Materials, 1992, 108, 109-110. | 1.0 | 9 |

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|-----|--|-----|-----------|
| 109 | Tunnelling through quantum dots. <i>Semiconductor Science and Technology</i> , 1996, 11, 1506-1511. | 1.0 | 9 |
| 110 | Coupled quantum dots: manifestation of an artificial molecule. <i>Superlattices and Microstructures</i> , 1998, 23, 1255-1264. | 1.4 | 9 |
| 111 | Nano-ploughed Josephson junctions as on-chip radiation sources. <i>Superlattices and Microstructures</i> , 1999, 25, 785-795. | 1.4 | 9 |
| 112 | Culturing and patch clamping of Jurkat T cells and neurons on Al ₂ O ₃ coated nanowire arrays of altered morphology. <i>RSC Advances</i> , 2019, 9, 11194-11201. | 1.7 | 9 |
| 113 | Single-crystalline silicon lift-off films for metal-oxide-semiconductor devices on arbitrary substrates. <i>Applied Physics Letters</i> , 2000, 77, 558-560. | 1.5 | 8 |
| 114 | Magnetotransport in freely suspended two-dimensional electron systems for integrated nanomechanical resonators. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 487-490. | 1.3 | 8 |
| 115 | Aharonov-Bohm oscillations for charge transport through two parallel quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 774-777. | 1.3 | 8 |
| 116 | Effect of surface bonding on semiconductor nanoribbon wiggling structure. <i>Applied Physics Letters</i> , 2010, 96, 111904. | 1.5 | 8 |
| 117 | Wavenumber-Domain Theory of Terahertz Single-Walled Carbon Nanotube Antenna. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012, 18, 166-175. | 1.9 | 8 |
| 118 | A Silicon Nanomembrane Detector for Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry (MALDI-TOF MS) of Large Proteins. <i>Sensors</i> , 2013, 13, 13708-13716. | 2.1 | 8 |
| 119 | Neurite guidance and neuro-caging on steps and grooves in 2.5 dimensions. <i>Nanoscale Advances</i> , 2020, 2, 5192-5200. | 2.2 | 8 |
| 120 | Influence of Alumina Addition on the Optical Properties and the Thermal Stability of Titania Thin Films and Inverse Opals Produced by Atomic Layer Deposition. <i>Nanomaterials</i> , 2021, 11, 1053. | 1.9 | 8 |
| 121 | Improved thermal stability of zirconia macroporous structures via homogeneous aluminum oxide doping and nanostructuring using atomic layer deposition. <i>Journal of the European Ceramic Society</i> , 2021, 41, 4302-4312. | 2.8 | 8 |
| 122 | Robust neuronal differentiation of human iPSC-derived neural progenitor cells cultured on densely-spaced spiky silicon nanowire arrays. <i>Scientific Reports</i> , 2021, 11, 18819. | 1.6 | 8 |
| 123 | Transport spectroscopy of single and coupled quantum-dot systems. <i>Physica B: Condensed Matter</i> , 1995, 212, 207-212. | 1.3 | 7 |
| 124 | Comparing schemes of displacement detection and subharmonic generation in nanomachined mechanical resonators. <i>Nanotechnology</i> , 2003, 14, 799-802. | 1.3 | 7 |
| 125 | Tracing the transition of a macro electron shuttle into nonlinear response. <i>Applied Physics Letters</i> , 2015, 106, 061909. | 1.5 | 7 |
| 126 | Low-Temperature Vapor-Solid Growth of ZnO Nanowhiskers for Electron Field Emission. <i>Coatings</i> , 2019, 9, 698. | 1.2 | 7 |

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|-----|---|-----|-----------|
| 127 | Nanomechanical resonators operating at radio frequencies. <i>Physica B: Condensed Matter</i> , 1999, 272, 575-577. | 1.3 | 6 |
| 128 | Electron-phonon interaction in freely suspended quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 18, 99-100. | 1.3 | 6 |
| 129 | Subthreshold field emission from thin silicon membranes. <i>Applied Physics Letters</i> , 2007, 91, 183506. | 1.5 | 6 |
| 130 | An Ultrawideband Cross-Correlation Radiometer for Mesoscopic Experiments. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2008, 57, 2874-2879. | 2.4 | 6 |
| 131 | A mode-locked nanomechanical electron shuttle for phase-coherent frequency conversion. <i>New Journal of Physics</i> , 2010, 12, 023019. | 1.2 | 6 |
| 132 | Local-Wetting-Induced Deformation of Rolled-Up Si/Si-Ge Nanomembranes: A Potential Route for Remote Chemical Sensing. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 21-25. | 1.1 | 6 |
| 133 | Rapid fabrication and piezoelectric tuning of micro- and nanopores in single crystal quartz. <i>Lab on a Chip</i> , 2013, 13, 156-160. | 3.1 | 6 |
| 134 | Creation and regulation of ion channels across reconstituted phospholipid bilayers generated by streptavidin-linked magnetite nanoparticles. <i>Physical Review E</i> , 2014, 89, 012707. | 0.8 | 6 |
| 135 | A single electron nanomechanical Y-switch. <i>Nanoscale</i> , 2014, 6, 8571. | 2.8 | 6 |
| 136 | Giant acoustoelectric current in suspended quantum point contacts. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 6 |
| 137 | Critical current and vortex lattice in superconducting UPt ₃ . <i>Journal of Magnetism and Magnetic Materials</i> , 1992, 108, 111-112. | 1.0 | 5 |
| 138 | Single-electron transistors with quantum dots. <i>Physica B: Condensed Matter</i> , 1996, 227, 82-86. | 1.3 | 5 |
| 139 | Single-electron tunneling in silicon nanostructures. <i>Applied Physics A: Materials Science and Processing</i> , 2000, 71, 357-365. | 1.1 | 5 |
| 140 | Fabrication of doped nano-electromechanical systems. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007, 1, 205-207. | 1.2 | 5 |
| 141 | A Temperature-Controlled Patch Clamp Platform Demonstrated on Jurkat T Lymphocytes and Human Induced Pluripotent Stem Cell-Derived Neurons. <i>Bioengineering</i> , 2020, 7, 46. | 1.6 | 5 |
| 142 | Acoustically driven Dirac electrons in monolayer graphene. <i>Applied Physics Letters</i> , 2020, 116, 103102. | 1.5 | 5 |
| 143 | Mechanically Modulated Sideband and Squeezing Effects of Membrane Resonators. <i>Physical Review Letters</i> , 2021, 127, 184301. | 2.9 | 5 |
| 144 | Field emission characteristics of ZnO nanowires grown by catalyst-assisted MOCVD on free-standing inorganic nanomembranes. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 255104. | 1.3 | 5 |

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|-----|---|-----|-----------|
| 145 | Drastic enhancement of nanoelectromechanical-system fabrication yield using electron-beam deposition. Applied Physics Letters, 2004, 85, 157-159. | 1.5 | 4 |
| 146 | Detection of coherent acoustic oscillations in a quantum electromechanical resonator. Applied Physics Letters, 2007, 90, 043101. | 1.5 | 4 |
| 147 | Local etch control for fabricating nanomechanical devices. Journal of Applied Physics, 2010, 108, 074307. | 1.1 | 4 |
| 148 | On-Chip Stochastic Resonance of Ion Channel Systems With Variable Internal Noise. IEEE Transactions on Nanobioscience, 2012, 11, 169-175. | 2.2 | 4 |
| 149 | Dataset of ptychographic X-ray computed tomography of inverse opal photonic crystals produced by atomic layer deposition. Data in Brief, 2018, 21, 1924-1936. | 0.5 | 4 |
| 150 | Transparency induced in opals via nanometer thick conformal coating. Scientific Reports, 2019, 9, 11379. | 1.6 | 4 |
| 151 | Transport spectroscopy in single-electron tunneling transistors. Nanotechnology, 1996, 7, 381-384. | 1.3 | 3 |
| 152 | Mechanical properties of suspended structures at radio frequencies. Physica B: Condensed Matter, 2000, 280, 553-554. | 1.3 | 3 |
| 153 | Auf dem Weg zur "Quanten"Mechanik"; Nanomechanische Resonatoren dienen als schnelle Schalter und Frequenzgeber. Physik Journal, 2000, 56, 31-36. | 0.1 | 3 |
| 154 | Single-electron effects in highly doped polysilicon nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 15, 60-64. | 1.3 | 3 |
| 155 | Top-gated few-electron double quantum dot in Si/SiGe. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 520-523. | 1.3 | 3 |
| 156 | Direct observation of sub-threshold field emission from silicon nanomembranes. Journal of Applied Physics, 2011, 109, 124504. | 1.1 | 3 |
| 157 | Direct microwave transmission on single β -hemolysin pores. Applied Physics Letters, 2011, 99, 093105. | 1.5 | 3 |
| 158 | Mechanical Modulation of Phonon-Assisted Field Emission in a Silicon Nanomembrane Detector for Time-of-Flight Mass Spectrometry. Sensors, 2016, 16, 200. | 2.1 | 3 |
| 159 | Transition of a nanomechanical Sharvin oscillator towards the chaotic regime. New Journal of Physics, 2017, 19, 033033. | 1.2 | 3 |
| 160 | Flow characterization and patch clamp dose responses using jet microfluidics in a tubeless microfluidic device. Journal of Neuroscience Methods, 2017, 291, 182-189. | 1.3 | 3 |
| 161 | Culturing human iPSC-derived neural progenitor cells on nanowire arrays: mapping the impact of nanowire length and array pitch on proliferation, viability, and membrane deformation. Nanoscale, 2021, 13, 20052-20066. | 2.8 | 3 |
| 162 | Dispersive transition of transverse ultrasound in the paramagnetic phase of CeAl ₂ . Journal of Low Temperature Physics, 1995, 99, 71-79. | 0.6 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Critical current phase diagram of the heavy-fermion superconductor UPt ₃ . Journal of Low Temperature Physics, 1996, 102, 349-358. | 0.6 | 2 |
| 164 | Evidence for quasi-classical transport of composite fermions in an inhomogeneous effective magnetic field. Semiconductor Science and Technology, 1996, 11, 1482-1487. | 1.0 | 2 |
| 165 | Electron-nuclear spin transfer in quantum-dot networks. Nanotechnology, 2005, 16, S266-S272. | 1.3 | 2 |
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