

# Robert H Blick

## List of Publications by Year in descending order

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Version: 2024-02-01

217  
papers

5,838  
citations

94433

37  
h-index

88630

70  
g-index

220  
all docs

220  
docs citations

220  
times ranked

5109  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                         | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1  | 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.                                        | 2.8  | 5         |
| 2  | Electron spin resonance in a proximity-coupled MoS <sub>2</sub> /graphene van der Waals heterostructure. <i>AIP Advances</i> , 2022, 12, 035111.                                                                                | 1.3  | 1         |
| 3  | Nuclear-induced dephasing and signatures of hyperfine effects in isotopically purified $^{13}\text{C}$ graphene. <i>Physical Review B</i> , 2022, 105, .                                                                        | 3.2  | 2         |
| 4  | Acoustically Induced Giant Synthetic Hall Voltages in Graphene. <i>Physical Review Letters</i> , 2022, 128, .                                                                                                                   | 7.8  | 12        |
| 5  | Polarization amplification by spin-doping in nanomagnetic/graphene hybrid systems. <i>Physical Review Materials</i> , 2021, 5, .                                                                                                | 2.4  | 2         |
| 6  | X-ray-Based Techniques to Study the Nano-Bio Interface. <i>ACS Nano</i> , 2021, 15, 3754-3807.                                                                                                                                  | 14.6 | 60        |
| 7  | 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.                           | 4.1  | 8         |
| 8  | 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.    | 5.7  | 8         |
| 9  | Direct writing of colloidal suspensions onto inclined surfaces: Optimizing dispense volume for homogeneous structures. <i>Journal of Colloid and Interface Science</i> , 2021, 597, 137-148.                                    | 9.4  | 10        |
| 10 | 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.                                            | 3.3  | 8         |
| 11 | Mechanically Modulated Sideband and Squeezing Effects of Membrane Resonators. <i>Physical Review Letters</i> , 2021, 127, 184301.                                                                                               | 7.8  | 5         |
| 12 | Harnessing Slow Light in Optoelectronically Engineered Nanoporous Photonic Crystals for Visible Light-Enhanced Photocatalysis. <i>ACS Catalysis</i> , 2021, 11, 12947-12962.                                                    | 11.2 | 24        |
| 13 | 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. <i>Nanoscale</i> , 2021, 13, 20052-20066. | 5.6  | 3         |
| 14 | Subtractive Low-Temperature Preparation Route for Porous SiO <sub>2</sub> Used for the Catalyst-Assisted Growth of ZnO Field Emitters. <i>Nanomaterials</i> , 2021, 11, 3357.                                                   | 4.1  | 1         |
| 15 | Toward Brain-on-a-Chip: Human Induced Pluripotent Stem Cell-Derived Guided Neuronal Networks in Tailor-Made 3D Nanoprinted Microscaffolds. <i>ACS Nano</i> , 2020, 14, 13091-13102.                                             | 14.6 | 44        |
| 16 | Microfluidic polyimide gas dynamic virtual nozzles for serial crystallography. <i>Review of Scientific Instruments</i> , 2020, 91, 085108.                                                                                      | 1.3  | 22        |
| 17 | Neurite guidance and neuro-caging on steps and grooves in 2.5 dimensions. <i>Nanoscale Advances</i> , 2020, 2, 5192-5200.                                                                                                       | 4.6  | 8         |
| 18 | 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.                                                | 3.5  | 5         |

| #  | ARTICLE                                                                                                                                                                                                                                      | IF   | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Acoustically driven Dirac electrons in monolayer graphene. <i>Applied Physics Letters</i> , 2020, 116, 103102.                                                                                                                               | 3.3  | 5         |
| 20 | Ion Selective Transport of Alkali Ions through a Polyelectrolyte Membrane. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000419.                                                                                                          | 3.7  | 2         |
| 21 | The Nanomechanical Bit. <i>Small</i> , 2020, 16, e2001580.                                                                                                                                                                                   | 10.0 | 15        |
| 22 | 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.                                               | 5.4  | 15        |
| 23 | Ablating nanoscale pores in crystalline quartz using laser-induced micro-plasmas in tri-layer structures. <i>Optical Materials Express</i> , 2020, 10, 1991.                                                                                 | 3.0  | 1         |
| 24 | Microwave-induced capacitance resonances and anomalous magnetoresistance in double quantum wells. <i>Journal of Applied Physics</i> , 2019, 125, .                                                                                           | 2.5  | 1         |
| 25 | 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.                                                                            | 3.5  | 14        |
| 26 | Effects of processing parameters on 3D structural ordering and optical properties of inverse opal photonic crystals produced by atomic layer deposition. <i>International Journal of Ceramic Engineering &amp; Science</i> , 2019, 1, 68-76. | 1.2  | 10        |
| 27 | Sculpturing wafer-scale nanofluidic devices for DNA single molecule analysis. <i>Nanoscale</i> , 2019, 11, 13620-13631.                                                                                                                      | 5.6  | 21        |
| 28 | Transparency induced in opals via nanometer thick conformal coating. <i>Scientific Reports</i> , 2019, 9, 11379.                                                                                                                             | 3.3  | 4         |
| 29 | Nanoscience and Nanotechnology at the Centennial of Universität Hamburg. <i>ACS Nano</i> , 2019, 13, 1-3.                                                                                                                                    | 14.6 | 1         |
| 30 | Cell Culture Platforms: Microscaffolds by Direct Laser Writing for Neurite Guidance Leading to Tailor-Made Neuronal Networks (Adv. Biosys. 5/2019). <i>Advanced Biology</i> , 2019, 3, 1970054.                                              | 3.0  | 0         |
| 31 | Resonant Tunneling Induced Enhancement of Electron Field Emission by Ultra-Thin Coatings. <i>Scientific Reports</i> , 2019, 9, 6840.                                                                                                         | 3.3  | 11        |
| 32 | Time-Resolved Analysis of the Structural Dynamics of Assembling Gold Nanoparticles. <i>ACS Nano</i> , 2019, 13, 6596-6604.                                                                                                                   | 14.6 | 30        |
| 33 | Microscaffolds by Direct Laser Writing for Neurite Guidance Leading to Tailor-Made Neuronal Networks. <i>Advanced Biology</i> , 2019, 3, e1800329.                                                                                           | 3.0  | 23        |
| 34 | Culturing and patch clamping of Jurkat T cells and neurons on Al <sub>2</sub> O <sub>3</sub> coated nanowire arrays of altered morphology. <i>RSC Advances</i> , 2019, 9, 11194-11201.                                                       | 3.6  | 9         |
| 35 | Low-Temperature Vapor-Solid Growth of ZnO Nanowhiskers for Electron Field Emission. <i>Coatings</i> , 2019, 9, 698.                                                                                                                          | 2.6  | 7         |
| 36 | Electrochemical Engineering of Nanoporous Materials for Photocatalysis: Fundamentals, Advances, and Perspectives. <i>Catalysts</i> , 2019, 9, 988.                                                                                           | 3.5  | 18        |

| #  | ARTICLE                                                                                                                                                                                                               | IF   | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Understanding the Growth Mechanisms of Multilayered Systems in Atomic Layer Deposition Process. Chemistry of Materials, 2018, 30, 1971-1979.                                                                          | 6.7  | 17        |
| 38 | Optically Active, Self-Assembled Solid-State Nanopores for Single Particle Detection. Biophysical Journal, 2018, 114, 492a.                                                                                           | 0.5  | 0         |
| 39 | 3D Micro Scaffolds for Tailor-Made Three-Dimensional Neural Network Studies. Biophysical Journal, 2018, 114, 672a-673a.                                                                                               | 0.5  | 1         |
| 40 | Broadband characterization of charge carrier transfer of hybrid graphene-deoxyribonucleic acid junctions. Carbon, 2018, 130, 525-531.                                                                                 | 10.3 | 15        |
| 41 | Designer Neural Networks with Embedded Semiconductor Microtube Arrays. Langmuir, 2018, 34, 1528-1534.                                                                                                                 | 3.5  | 11        |
| 42 | Wireless Sensor-Actuator Network for Cell-Level Treatment Based on Protocol of Collision Segregation via Learning. IEEE Access, 2018, 6, 58967-58976.                                                                 | 4.2  | 1         |
| 43 | Photonic materials for high-temperature applications: Synthesis and characterization by X-ray ptychographic tomography. Applied Materials Today, 2018, 13, 359-369.                                                   | 4.3  | 18        |
| 44 | Dataset of ptychographic X-ray computed tomography of inverse opal photonic crystals produced by atomic layer deposition. Data in Brief, 2018, 21, 1924-1936.                                                         | 1.0  | 4         |
| 45 | Single-neuronal cell culture and monitoring platform using a fully transparent microfluidic DEP device. Scientific Reports, 2018, 8, 13194.                                                                           | 3.3  | 14        |
| 46 | Tank Circuit for Ultrafast Single-Particle Detection in Micropores. Physical Review Letters, 2018, 121, 078102.                                                                                                       | 7.8  | 12        |
| 47 | Solar Cell Nanowires as Approach for Single Cell Direct Activation. Biophysical Journal, 2018, 114, 669a.                                                                                                             | 0.5  | 0         |
| 48 | Ultra-fast cell counters based on microtubular waveguides. Scientific Reports, 2017, 7, 41584.                                                                                                                        | 3.3  | 19        |
| 49 | Effects of electron confinement on the acoustoelectric current in suspended quantum point contacts. Applied Physics Letters, 2017, 110, 223102.                                                                       | 3.3  | 1         |
| 50 | Upscaling high-quality CVD graphene devices to 100 micron-scale and beyond. Applied Physics Letters, 2017, 110, .                                                                                                     | 3.3  | 16        |
| 51 | Transition of a nanomechanical Sharvin oscillator towards the chaotic regime. New Journal of Physics, 2017, 19, 033033.                                                                                               | 2.9  | 3         |
| 52 | Low-temperature Mullite Formation in Ternary Oxide Coatings Deposited by ALD for High-temperature Applications. Advanced Materials Interfaces, 2017, 4, 1700912.                                                      | 3.7  | 12        |
| 53 | Flow characterization and patch clamp dose responses using jet microfluidics in a tubeless microfluidic device. Journal of Neuroscience Methods, 2017, 291, 182-189.                                                  | 2.5  | 3         |
| 54 | Photonic Materials: Low-temperature Mullite Formation in Ternary Oxide Coatings Deposited by ALD for High-temperature Applications (Adv. Mater. Interfaces 23/2017). Advanced Materials Interfaces, 2017, 4, 1770122. | 3.7  | 1         |

| #  | ARTICLE                                                                                                                                                                                                             | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Strain-induced Dirac state shift in topological insulator Bi <sub>2</sub> Se <sub>3</sub> nanowires. Applied Physics Letters, 2017, 111, 171601.                                                                    | 3.3 | 14        |
| 56 | Mechanical Modulation of Phonon-Assisted Field Emission in a Silicon Nanomembrane Detector for Time-of-Flight Mass Spectrometry. Sensors, 2016, 16, 200.                                                            | 3.8 | 3         |
| 57 | Approaching Integrated Hybrid Neural Circuits: Axon Guiding on Optically Active Semiconductor Microtube Arrays. Advanced Materials Interfaces, 2016, 3, 1600746.                                                    | 3.7 | 10        |
| 58 | Optically active semiconductor nanopores for parallel molecule detection. Applied Physics Letters, 2016, 109, 223103.                                                                                               | 3.3 | 1         |
| 59 | Optical Microresonators: Approaching Integrated Hybrid Neural Circuits: Axon Guiding on Optically Active Semiconductor Microtube Arrays (Adv. Mater. Interfaces 24/2016). Advanced Materials Interfaces, 2016, 3, . | 3.7 | 0         |
| 60 | Dynamic control for nanostructures through slowly ramping parameters. Physical Review E, 2016, 93, 062225.                                                                                                          | 2.1 | 0         |
| 61 | Stochastic model of nanomechanical electron shuttles and symmetry breaking. Physical Review E, 2016, 93, 063306.                                                                                                    | 2.1 | 2         |
| 62 | Giant acoustoelectric current in suspended quantum point contacts. Physical Review B, 2016, 94, .                                                                                                                   | 3.2 | 6         |
| 63 | Neuroimage: A Novel Highly Efficient Tool for Image Processing of in vivo Neural Networks. Biophysical Journal, 2015, 108, 472a.                                                                                    | 0.5 | 0         |
| 64 | Synthetic neuronal circuits: Optically active semiconductor microtubes as remotely accessible sensors for action potentials. , 2015, , .                                                                            |     | 2         |
| 65 | Simulation Results for an Optically Active Semiconductor Nanopore. Biophysical Journal, 2015, 108, 326a.                                                                                                            | 0.5 | 0         |
| 66 | Tracing the transition of a macro electron shuttle into nonlinear response. Applied Physics Letters, 2015, 106, 061909.                                                                                             | 3.3 | 7         |
| 67 | Tightly wrapped semiconductor-axon microtubes for probing hybrid networks: Modeling the capacitive coupling strength. Applied Physics Letters, 2015, 106, .                                                         | 3.3 | 1         |
| 68 | Creation and regulation of ion channels across reconstituted phospholipid bilayers generated by streptavidin-linked magnetite nanoparticles. Physical Review E, 2014, 89, 012707.                                   | 2.1 | 6         |
| 69 | Modeling a radio-frequency single-electron-transistor scanning probe. Japanese Journal of Applied Physics, 2014, 53, 085001.                                                                                        | 1.5 | 2         |
| 70 | A single electron nanomechanical Y-switch. Nanoscale, 2014, 6, 8571.                                                                                                                                                | 5.6 | 6         |
| 71 | Ultra-stable glass microcraters for on-chip patch clamping. RSC Advances, 2014, 4, 39073-39076.                                                                                                                     | 3.6 | 1         |
| 72 | Radio-Frequency Tank Circuit for DNA Sequencing. Biophysical Journal, 2014, 106, 415a-416a.                                                                                                                         | 0.5 | 0         |

| #  | ARTICLE                                                                                                                                                                            | IF   | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 73 | Optical Sensing of Action Potentials in Semiconductor Microtubes using In(Al)GaAs Quantum Wells. Biophysical Journal, 2014, 106, 793a.                                             | 0.5  | 0         |
| 74 | Modeling of the Coupling Strength between Axons and Semiconductor Micro-Tubes. Biophysical Journal, 2013, 104, 164a.                                                               | 0.5  | 0         |
| 75 | Guided Growth and Electrical Probing of Neurons on Arrays of Biofunctionalized GaAs/InGaAs Semiconductor Microtubes. Biophysical Journal, 2013, 104, 329a.                         | 0.5  | 2         |
| 76 | Realizing Broadbands of Strong Nonlinear Coupling in Nanoelectromechanical Electron Shuttles. Physical Review Letters, 2013, 111, 197202.                                          | 7.8  | 17        |
| 77 | Optical Sensing of Axons in GaAs Ring Resonators. Biophysical Journal, 2013, 104, 162a.                                                                                            | 0.5  | 0         |
| 78 | Rapid fabrication and piezoelectric tuning of micro- and nanopores in single crystal quartz. Lab on A Chip, 2013, 13, 156-160.                                                     | 6.0  | 6         |
| 79 | Phonon-Assisted Field Emission in Silicon Nanomembranes for Time-of-Flight Mass Spectrometry of Proteins. Nano Letters, 2013, 13, 2698-2703.                                       | 9.1  | 25        |
| 80 | A Silicon Nanomembrane Detector for Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry (MALDI-TOF MS) of Large Proteins. Sensors, 2013, 13, 13708-13716. | 3.8  | 8         |
| 81 | Guided neuronal growth on arrays of biofunctionalized GaAs/InGaAs semiconductor microtubes. Applied Physics Letters, 2013, 103, .                                                  | 3.3  | 16        |
| 82 | Direct Transfer of GaAs Microtube Arrays onto Transparent Substrates for Imaging Neuron Outgrowth. Soft Nanoscience Letters, 2013, 03, 79-82.                                      | 0.8  | 2         |
| 83 | Radio Frequency Tank Circuit for Probing Planar Lipid Bilayers. Soft Nanoscience Letters, 2013, 03, 87-92.                                                                         | 0.8  | 2         |
| 84 | On-Chip Stochastic Resonance of Ion Channel Systems With Variable Internal Noise. IEEE Transactions on Nanobioscience, 2012, 11, 169-175.                                          | 3.3  | 4         |
| 85 | Prolonged Stochastic Resonance in Single Ion Channel Recordings. Biophysical Journal, 2012, 102, 518a-519a.                                                                        | 0.5  | 0         |
| 86 | Nanomechanical bi-polar current switch. , 2012, , .                                                                                                                                |      | 0         |
| 87 | Quasi-dynamic mode of nanomembranes for time-of-flight mass spectrometry of proteins. Nanoscale, 2012, 4, 2543.                                                                    | 5.6  | 11        |
| 88 | Mechanical actuation of ion channels using a piezoelectric planar patch clamp system. Lab on A Chip, 2012, 12, 80-87.                                                              | 6.0  | 13        |
| 89 | High Bandwidth Resonant Radio Frequency Circuit for Lipid Bilayer Detection. Biophysical Journal, 2012, 102, 181a.                                                                 | 0.5  | 1         |
| 90 | Coulomb Blockade in a Coupled Nanomechanical Electron Shuttle. ACS Nano, 2012, 6, 651-655.                                                                                         | 14.6 | 28        |

| #   | ARTICLE                                                                                                                                                              | IF   | CITATIONS |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91  | Wavenumber-Domain Theory of Terahertz Single-Walled Carbon Nanotube Antenna. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 166-175.              | 2.9  | 8         |
| 92  | Piezoelectric Planar Patch Clamp System for Mechanically Actuating Ion Channels. Biophysical Journal, 2011, 100, 620a.                                               | 0.5  | 0         |
| 93  | A Mechanical Nanomembrane Detector for Time-of-Flight Mass Spectrometry. Nano Letters, 2011, 11, 3681-3684.                                                          | 9.1  | 39        |
| 94  | Giant Piezoelectricity on Si for Hyperactive MEMS. Science, 2011, 334, 958-961.                                                                                      | 12.6 | 394       |
| 95  | Semiconductor Nanomembrane Tubes: Three-Dimensional Confinement for Controlled Neurite Outgrowth. ACS Nano, 2011, 5, 2447-2457.                                      | 14.6 | 85        |
| 96  | Local-Wetting-Induced Deformation of Rolled-Up Si/Si-Ge Nanomembranes: A Potential Route for Remote Chemical Sensing. IEEE Nanotechnology Magazine, 2011, 10, 21-25. | 2.0  | 6         |
| 97  | Direct observation of sub-threshold field emission from silicon nanomembranes. Journal of Applied Physics, 2011, 109, 124504.                                        | 2.5  | 3         |
| 98  | Direct microwave transmission on single $\text{Î±}$ -hemolysin pores. Applied Physics Letters, 2011, 99, 093105.                                                     | 3.3  | 3         |
| 99  | Fabrication of suspended fully metallic ultra-small capacitance nano-junctions. Physica Status Solidi - Rapid Research Letters, 2010, 4, 115-117.                    | 2.4  | 0         |
| 100 | Spin relaxation in isotopically purified silicon quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 639-642.                             | 2.7  | 2         |
| 101 | Effect of surface bonding on semiconductor nanoribbon wiggling structure. Applied Physics Letters, 2010, 96, 111904.                                                 | 3.3  | 8         |
| 102 | Pauli spin blockade and lifetime-enhanced transport in a Si/SiGe double quantum dot. Physical Review B, 2010, 82, .                                                  | 3.2  | 23        |
| 103 | Local etch control for fabricating nanomechanical devices. Journal of Applied Physics, 2010, 108, 074307.                                                            | 2.5  | 4         |
| 104 | Marshmallowing of nanopillar arrays by field emission. Journal of Applied Physics, 2010, 107, 054308.                                                                | 2.5  | 1         |
| 105 | Radio frequency rectification on membrane bound pores. Nanotechnology, 2010, 21, 075201.                                                                             | 2.6  | 10        |
| 106 | Self-excitation of single nanomechanical pillars. New Journal of Physics, 2010, 12, 033008.                                                                          | 2.9  | 17        |
| 107 | A mode-locked nanomechanical electron shuttle for phase-coherent frequency conversion. New Journal of Physics, 2010, 12, 023019.                                     | 2.9  | 6         |
| 108 | Coulomb-Controlled Single Electron Field Emission via a Freely Suspended Metallic Island. Nano Letters, 2010, 10, 615-619.                                           | 9.1  | 17        |

| #   | ARTICLE                                                                                                                                                      | IF   | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Spontaneous Symmetry Breaking in Two Coupled Nanomechanical Electron Shuttles. <i>Physical Review Letters</i> , 2010, 105, 067204.                           | 7.8  | 26        |
| 110 | Single-Ion Channel Recordings on Quartz Substrates. <i>IEEE Transactions on Nanobioscience</i> , 2010, 9, 307-309.                                           | 3.3  | 11        |
| 111 | Optimizing Functionality of Ion Channel Biosensing using Stochastic Resonance. <i>Biophysical Journal</i> , 2010, 98, 603a.                                  | 0.5  | 0         |
| 112 | Field electron emission under Coulomb blockade in a suspended metallic island. , 2010, , .                                                                   |      | 1         |
| 113 | Laser drilling of nano-pores in sandwiched thin glass membranes. <i>Optics Express</i> , 2009, 17, 10044.                                                    | 3.4  | 23        |
| 114 | Top-gated few-electron double quantum dot in Si/SiGe. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 520-523.                      | 2.7  | 3         |
| 115 | Shock waves in suspended low-dimensional electron gases. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1191-1193.                 | 2.7  | 2         |
| 116 | Spin blockade and lifetime-enhanced transport in a few-electron Si/SiGe double quantum dot. <i>Nature Physics</i> , 2008, 4, 540-544.                        | 16.7 | 148       |
| 117 | An Ultrawideband Cross-Correlation Radiometer for Mesoscopic Experiments. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2008, 57, 2874-2879. | 4.7  | 6         |
| 118 | Mechanical single nanopillars and arrays as field emission devices. , 2008, , .                                                                              |      | 0         |
| 119 | Nanopillar arrays on semiconductor membranes as electron emission amplifiers. <i>Nanotechnology</i> , 2008, 19, 095504.                                      | 2.6  | 12        |
| 120 | Shock Waves in Nanomechanical Resonators. <i>Physical Review Letters</i> , 2008, 100, 026801.                                                                | 7.8  | 14        |
| 121 | A nanomechanical computerâ€”exploring new avenues of computing. <i>New Journal of Physics</i> , 2007, 9, 241-241.                                            | 2.9  | 43        |
| 122 | Field emission from a single nanomechanical pillar. <i>Nanotechnology</i> , 2007, 18, 065201.                                                                | 2.6  | 14        |
| 123 | Subthreshold field emission from thin silicon membranes. <i>Applied Physics Letters</i> , 2007, 91, 183506.                                                  | 3.3  | 6         |
| 124 | Detection of coherent acoustic oscillations in a quantum electromechanical resonator. <i>Applied Physics Letters</i> , 2007, 90, 043101.                     | 3.3  | 4         |
| 125 | Magnetotransport through two dimensional electron gas in a tubular geometry. <i>Applied Physics Letters</i> , 2007, 90, 042101.                              | 3.3  | 28        |
| 126 | Direct mechanical mixing in a nanoelectromechanical diode. <i>Applied Physics Letters</i> , 2007, 91, 143101.                                                | 3.3  | 17        |



| #   | ARTICLE                                                                                                                                                  | IF   | CITATIONS |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 127 | Nanoelectromechanical systems as single electron switches and field emitters. , 2007, , .                                                                |      | 0         |
| 128 | Single-electron quantum dot in Si <sup>+</sup> SiGe with integrated charge sensing. Applied Physics Letters, 2007, 91, .                                 | 3.3  | 72        |
| 129 | Field emission from nanomechanically modulated electron islands. , 2007, , .                                                                             |      | 0         |
| 130 | Magnetotransport in Nonplanar SiGe/Si Nanomembranes. IEEE Nanotechnology Magazine, 2007, 6, 446-450.                                                     | 2.0  | 12        |
| 131 | Fabrication of doped nano-electromechanical systems. Physica Status Solidi - Rapid Research Letters, 2007, 1, 205-207.                                   | 2.4  | 5         |
| 132 | Colloidal quantum dots produce current bursts in lipid bilayers. , 2006, , .                                                                             |      | 0         |
| 133 | Observation of single-defect relaxation in a freely suspended nano resonator. Europhysics Letters, 2006, 76, 1207-1213.                                  | 2.0  | 11        |
| 134 | Quantum dots in Si/SiGe 2DEGs with Schottky top-gated leads. New Journal of Physics, 2005, 7, 246-246.                                                   | 2.9  | 28        |
| 135 | Formation of microtubes from strained SiGe/Si heterostructures. New Journal of Physics, 2005, 7, 241-241.                                                | 2.9  | 13        |
| 136 | Colloidal quantum dots initiating current bursts in lipid bilayers. Biosensors and Bioelectronics, 2005, 20, 2173-2176.                                  | 10.1 | 26        |
| 137 | Nanomechanical Architecture of Strained Bilayer Thin Films: From Design Principles to Experimental Fabrication. Advanced Materials, 2005, 17, 2860-2864. | 21.0 | 167       |
| 138 | Stochastic Resonance of Artificial Ion Channels inserted in Small Membrane Patches. AIP Conference Proceedings, 2005, , .                                | 0.4  | 1         |
| 139 | Electron nuclear spin transfer in quantum-dot networks. Nanotechnology, 2005, 16, S266-S272.                                                             | 2.6  | 2         |
| 140 | Current bursts in lipid bilayers initiated by colloidal quantum dots. Applied Physics Letters, 2005, 86, 083901.                                         | 3.3  | 15        |
| 141 | Periodic Field Emission from an Isolated Nanoscale Electron Island. Physical Review Letters, 2004, 93, 186801.                                           | 7.8  | 40        |
| 142 | Bonding silicon-on-insulator to glass wafers for integrated bio-electronic circuits. Applied Physics Letters, 2004, 85, 2370-2372.                       | 3.3  | 24        |
| 143 | Effects of low attenuation in a nanomechanical electron shuttle. Journal of Applied Physics, 2004, 96, 1757-1759.                                        | 2.5  | 11        |
| 144 | Drastic enhancement of nanoelectromechanical-system fabrication yield using electron-beam deposition. Applied Physics Letters, 2004, 85, 157-159.        | 3.3  | 4         |

| #   | ARTICLE                                                                                                                                                                      | IF   | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 145 | Silicon nanopillars for mechanical single-electron transport. Applied Physics Letters, 2004, 84, 4632-4634.                                                                  | 3.3  | 97        |
| 146 | Fabrication and contacting of single Bi nanowires. Nanotechnology, 2004, 15, S201-S207.                                                                                      | 2.6  | 56        |
| 147 | A "bed of nails"™ on silicon. Nature, 2004, 432, 450-451.                                                                                                                    | 27.8 | 14        |
| 148 | Coulomb blockade in a silicon/silicon-germanium two-dimensional electron gas quantum dot. Applied Physics Letters, 2004, 84, 4047-4049.                                      | 3.3  | 55        |
| 149 | On geometric potentials in quantum-electromechanical circuits. New Journal of Physics, 2004, 6, 33-33.                                                                       | 2.9  | 47        |
| 150 | A quantum electromechanical device: the electromechanical single-electron pillar. Superlattices and Microstructures, 2003, 33, 397-403.                                      | 3.1  | 0         |
| 151 | Phase coherent transport in two coupled quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 76-82.                                                | 2.7  | 16        |
| 152 | Electron-phonon interaction in freely suspended quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 18, 99-100.                                       | 2.7  | 6         |
| 153 | Dynamic control and modal analysis of coupled nano-mechanical resonators. Applied Physics Letters, 2003, 82, 3333-3335.                                                      | 3.3  | 11        |
| 154 | Fabrication and transport characterization of a primary thermometer formed by Coulomb islands in a suspended silicon nanowire. Applied Physics Letters, 2003, 82, 3773-3775. | 3.3  | 15        |
| 155 | Electrical characterization of electrochemically grown single copper nanowires. Applied Physics Letters, 2003, 82, 2139-2141.                                                | 3.3  | 164       |
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