

Heiner Linke

List of Publications by Year in descending order

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217
papers

6,553
citations

81743

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71532

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g-index

219
all docs

219
docs citations

219
times ranked

5596
citing authors

#	ARTICLE	IF	CITATIONS
1	Through the Eyes of Creators: Observing Artificial Molecular Motors. ACS Nanoscience Au, 2022, 2, 140-159.	2.0	7
2	Biocomputation Using Molecular Agents Moving in Microfluidic Channel Networks: An Alternative Platform for Information Technology. Studies in Systems, Decision and Control, 2022, , 15-27.	0.8	0
3	Optical-Beam-Induced Current in InAs/InP Nanowires for Hot-Carrier Photovoltaics. ACS Applied Energy Materials, 2022, 5, 7728-7734.	2.5	3
4	Solving Exact Cover Instances with Molecular-Motor-Powered Network-Based Biocomputation. ACS Nanoscience Au, 2022, 2, 396-403.	2.0	4
5	Fluorescence Signal Enhancement in Antibody Microarrays Using Lightguiding Nanowires. Nanomaterials, 2021, 11, 227.	1.9	8
6	Prospects for single-molecule electrostatic detection in molecular motor gliding motility assays. New Journal of Physics, 2021, 23, 065003.	1.2	2
7	Semiconductor nanowire array for transparent photovoltaic applications. Applied Physics Letters, 2021, 118, 191107.	1.5	9
8	Tuning up Maxwell's demon. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2108218118.	3.3	2
9	Hot-carrier optoelectronic devices based on semiconductor nanowires. Applied Physics Reviews, 2021, 8, .	5.5	24
10	Design of network-based biocomputation circuits for the exact cover problem. New Journal of Physics, 2021, 23, 085004.	1.2	7
11	Prolonged function and optimization of actomyosin motility for upscaled network-based biocomputation. New Journal of Physics, 2021, 23, 085005.	1.2	11
12	Physical requirements for scaling up network-based biocomputation. New Journal of Physics, 2021, 23, 105004.	1.2	9
13	Solving the subset sum problem with a nonideal biological computer. New Journal of Physics, 2021, 23, 095007.	1.2	3
14	Dissipation Reduction and Information-to-Measurement Conversion in DNA Pulling Experiments with Feedback Protocols. Physical Review X, 2021, 11, .	2.8	5
15	Molecular motor-driven filament transport across three-dimensional, polymeric micro-junctions. New Journal of Physics, 2021, 23, 125002.	1.2	9
16	Implementing an Insect Brain Computational Circuit Using III-V Nanowire Components in a Single Shared Waveguide Optical Network. ACS Photonics, 2020, 7, 2787-2798.	3.2	5
17	Synthetic biology approaches to dissecting linear motor protein function: towards the design and synthesis of artificial autonomous protein walkers. Biophysical Reviews, 2020, 12, 1041-1054.	1.5	12
18	Optoelectronic III-V nanowire implementation of a neural network in a shared waveguide. , 2020, , .		0

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19	Hot-carrier separation in heterostructure nanowires observed by electron-beam induced current. <i>Nanotechnology</i> , 2020, 31, 394004.	1.3	10
20	Hot-Carrier Extraction in Nanowire-Nanoantenna Photovoltaic Devices. <i>Nano Letters</i> , 2020, 20, 4064-4072.	4.5	21
21	Single-Molecule Detection with Lightguiding Nanowires: Determination of Protein Concentration and Diffusivity in Supported Lipid Bilayers. <i>Nano Letters</i> , 2019, 19, 6182-6191.	4.5	11
22	Optimal power and efficiency of single quantum dot heat engines: Theory and experiment. <i>Physical Review B</i> , 2019, 99, .	1.1	26
23	Regeneration of Assembled, Molecular-Motor-Based Bionanodevices. <i>Nano Letters</i> , 2019, 19, 7155-7163.	4.5	13
24	Biosensing using arrays of vertical semiconductor nanowires: mechanosensing and biomarker detection. <i>Nanotechnology</i> , 2019, 30, 214003.	1.3	21
25	The bar-hinge motor: a synthetic protein design exploiting conformational switching to achieve directional motility. <i>New Journal of Physics</i> , 2019, 21, 013002.	1.2	4
26	Nanowire photodetectors with embedded quantum heterostructures for infrared detection. <i>Infrared Physics and Technology</i> , 2019, 96, 209-212.	1.3	6
27	Achieving short high-quality gate-all-around structures for horizontal nanowire field-effect transistors. <i>Nanotechnology</i> , 2019, 30, 064001.	1.3	12
28	Design and development of nanoimprint-enabled structures for molecular motor devices. <i>Materials Research Express</i> , 2019, 6, 025057.	0.8	4
29	Quantum Szilard Engine with Attractively Interacting Bosons. <i>Physical Review Letters</i> , 2018, 120, 100601.	2.9	46
30	Thermoelectric Power Factor Limit of a 1D Nanowire. <i>Physical Review Letters</i> , 2018, 120, 177703.	2.9	30
31	Intersubband Quantum Disc-in-Nanowire Photodetectors with Normal-Incidence Response in the Long-Wavelength Infrared. <i>Nano Letters</i> , 2018, 18, 365-372.	4.5	34
32	Thermoelectric Characterization of the Kondo Resonance in Nanowire Quantum Dots. <i>Physical Review Letters</i> , 2018, 121, 206801.	2.9	39
33	Controlled Surface Silanization for Actin-Myosin Based Nanodevices and Biocompatibility of New Polymer Resists. <i>Langmuir</i> , 2018, 34, 8777-8784.	1.6	17
34	A quantum-dot heat engine operating close to the thermodynamic efficiency limits. <i>Nature Nanotechnology</i> , 2018, 13, 920-924.	15.6	201
35	Nanowires for Biosensing: Lightguiding of Fluorescence as a Function of Diameter and Wavelength. <i>Nano Letters</i> , 2018, 18, 4796-4802.	4.5	29
36	Influence of Quantum Interference on the Thermoelectric Properties of Molecular Junctions. <i>Nano Letters</i> , 2018, 18, 5666-5672.	4.5	93

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37	Approach to combine electron-beam lithography and two-photon polymerization for enhanced nano-channels in network-based biocomputation devices. , 2018, , .		3
38	Construction of a Chassis for a Tripartite Protein-Based Molecular Motor. ACS Synthetic Biology, 2017, 6, 1096-1102.	1.9	11
39	Bipolar Photothermoelectric Effect Across Energy Filters in Single Nanowires. Nano Letters, 2017, 17, 4055-4060.	4.5	32
40	Conduction Band Offset and Polarization Effects in InAs Nanowire Polytype Junctions. Nano Letters, 2017, 17, 902-908.	4.5	34
41	Single-nanowire, low-bandgap hot carrier solar cells with tunable open-circuit voltage. Nanotechnology, 2017, 28, 434001.	1.3	17
42	Absorption in and scattering from single horizontal Au-contacted InAs/InP heterostructure nanowires. , 2016, , .		0
43	On the Formation of Lipid Nano-Scale Structures at Interfaces Beyond Planar Bilayers. Biophysical Journal, 2016, 110, 189a.	0.2	0
44	Reply to Einarsson: The computational power of parallel network exploration with many bioagents. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3188.	3.3	3
45	Experiments on the thermoelectric properties of quantum dots. Comptes Rendus Physique, 2016, 17, 1096-1108.	0.3	26
46	Parallel computation with molecular-motor-propelled agents in nanofabricated networks. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2591-2596.	3.3	116
47	Nonlinear thermoelectric response due to energy-dependent transport properties of a quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 34-38.	1.3	17
48	Using Polymer Electrolyte Gates to Set a Conductance Freeze Threshold Voltage and Local Potential in Nanowire-Based Devices and Thermoelectrics. Advanced Functional Materials, 2015, 25, 255-262.	7.8	14
49	Reversible electron-hole separation in a hot carrier solar cell. New Journal of Physics, 2015, 17, 095004.	1.2	33
50	Thermoelectric performance of classical topological insulator nanowires. Semiconductor Science and Technology, 2015, 30, 015015.	1.0	40
51	Characterization of Ambipolar GaSb/InAs Core-Shell Nanowires by Thermovoltage Measurements. ACS Nano, 2015, 9, 7033-7040.	7.3	15
52	Optical Trapping of Gold Nanoparticles in Air. Nano Letters, 2015, 15, 4713-4719.	4.5	71
53	Motor properties from persistence: a linear molecular walker lacking spatial and temporal asymmetry. New Journal of Physics, 2015, 17, 055017.	1.2	8
54	InAs Nanowire Transistors with Multiple, Independent Wrap-Gate Segments. Nano Letters, 2015, 15, 2836-2843.	4.5	36

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55	Design and Construction of the Lawnmower, An Artificial Burnt-Bridges Motor. IEEE Transactions on Nanobioscience, 2015, 14, 305-312.	2.2	13
56	Nanowire-Imposed Geometrical Control in Studies of Actomyosin Motor Function. IEEE Transactions on Nanobioscience, 2015, 14, 289-297.	2.2	9
57	Optical trapping of gold aerosols. Proceedings of SPIE, 2015, , .	0.8	0
58	Molecular motor efficiency is maximized in the presence of both power-stroke and rectification through feedback. New Journal of Physics, 2015, 17, 065011.	1.2	22
59	Surface nanostructures for fluorescence probing of supported lipid bilayers on reflective substrates. Nanoscale, 2015, 7, 18020-18024.	2.8	2
60	Nanoscale polymer electrolytes: Fabrication and applications using nanowire transistors. , 2014, , .		0
61	Focus on thermoelectric effects in nanostructures. New Journal of Physics, 2014, 16, 110201.	1.2	20
62	Fluidic switching in nanochannels for the control of Inchworm: a synthetic biomolecular motor with a power stroke. Nanoscale, 2014, 6, 15008-15019.	2.8	12
63	Thermopower as a tool to investigate many-body effects in quantum systems. Applied Physics Letters, 2014, 105, 083105.	1.5	2
64	Experimental verification of reciprocity relations in quantum thermoelectric transport. Physical Review B, 2014, 90, .	1.1	34
65	Fully tunable, non-invasive thermal biasing of gated nanostructures suitable for low-temperature studies. Nanotechnology, 2014, 25, 385704.	1.3	11
66	Construction and Characterization of Kilobasepair Densely Labeled Peptide-DNA. Biomacromolecules, 2014, 15, 4065-4072.	2.6	16
67	Electron-Beam Patterning of Polymer Electrolyte Films To Make Multiple Nanoscale Gates for Nanowire Transistors. Nano Letters, 2014, 14, 94-100.	4.5	27
68	Fluid and Highly Curved Model Membranes on Vertical Nanowire Arrays. Nano Letters, 2014, 14, 4286-4292.	4.5	32
69	Molecular Motor Propelled Filaments Reveal Light-Guiding in Nanowire Arrays for Enhanced Biosensing. Nano Letters, 2014, 14, 737-742.	4.5	32
70	Time-Resolved X-ray Diffraction Investigation of the Modified Phonon Dispersion in InSb Nanowires. Nano Letters, 2014, 14, 541-546.	4.5	16
71	Molecular Motor Transport through Hollow Nanowires. Nano Letters, 2014, 14, 3041-3046.	4.5	32
72	Introducing a Kinesin-Inspired Nanomotor Concept. Biophysical Journal, 2014, 106, 782a.	0.2	0

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73	Light Driven Conformational Switching: An Approach to Creating Designed Protein Motion. Biophysical Journal, 2014, 106, 244a-245a.	0.2	0
74	Three-Dimensionally Constrained Actomyosin Motility on Oxide Coated Semiconductor Nanowires. Biophysical Journal, 2014, 106, 453a.	0.2	0
75	Is it the boundaries or disorder that dominates electron transport in semiconductor 'billiards'?. Fortschritte Der Physik, 2013, 61, 332-347.	1.5	11
76	Controlled microfluidic switching in arbitrary time-sequences with low drag. Lab on A Chip, 2013, 13, 2389.	3.1	10
77	Ultrafast molecular motor driven nanoseparation and biosensing. Biosensors and Bioelectronics, 2013, 48, 145-152.	5.3	37
78	Large Thermoelectric Power Factor Enhancement Observed in InAs Nanowires. Nano Letters, 2013, 13, 4080-4086.	4.5	107
79	The Lawnmower: An Autonomous Synthetic Protein Motor. Biophysical Journal, 2013, 104, 545a.	0.2	0
80	Nanoscale energy converters. , 2013, , .		0
81	Dynamic Guiding of Motor-Driven Microtubules on Electrically Heated, Smart Polymer Tracks. Nano Letters, 2013, 13, 3434-3438.	4.5	39
82	Control and understanding of kink formation in InAs-InP heterostructure nanowires. Nanotechnology, 2013, 24, 345601.	1.3	14
83	Nonlinear thermovoltage and thermocurrent in quantum dots. New Journal of Physics, 2013, 15, 105011.	1.2	104
84	Tracking Actomyosin at Fluorescence Check Points. Scientific Reports, 2013, 3, 1092.	1.6	11
85	Three-Dimensional Tracking of Small Aquatic Organisms Using Fluorescent Nanoparticles. PLoS ONE, 2013, 8, e78498.	1.1	40
86	Design and Construction of a One-Dimensional DNA Track for an Artificial Molecular Motor. Journal of Nanomaterials, 2012, 2012, 1-10.	1.5	7
87	Lineshape of the thermopower of quantum dots. New Journal of Physics, 2012, 14, 033041.	1.2	60
88	Phonon Transport and Thermoelectricity in Defect-Engineered InAs Nanowires. Materials Research Society Symposia Proceedings, 2012, 1404, 36.	0.1	6
89	Optimization of a self-closing effect to produce nanochannels with top slits in fused silica. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 06FF09.	0.6	3
90	Heat flow in InAs/InP heterostructure nanowires. Physical Review B, 2012, 86, .	1.1	11

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91	Probing the sensitivity of electron wave interference to disorder-induced scattering in solid-state devices. <i>Physical Review B</i> , 2012, 85, .	1.1	8
92	“You need another gate, mate”; g-factor engineering in quantum wires and wrap-gated nanowires. , 2012, , .		0
93	Squaring the Circle in Peptide Assembly: From Fibers to Discrete Nanostructures by <i>de Novo</i> Design. <i>Journal of the American Chemical Society</i> , 2012, 134, 15457-15467.	6.6	87
94	Fabrication of bottle-shaped nanochannels in fused silica using a self-closing effect. <i>Microelectronic Engineering</i> , 2012, 97, 173-176.	1.1	1
95	Antibodies Covalently Immobilized on Actin Filaments for Fast Myosin Driven Analyte Transport. <i>PLoS ONE</i> , 2012, 7, e46298.	1.1	22
96	Thermoelectric Characterization of Electronic Properties of GaMnAs Nanowires. <i>Journal of Nanotechnology</i> , 2012, 2012, 1-5.	1.5	10
97	Thermally driven ballistic rectifier. <i>Physical Review B</i> , 2012, 85, .	1.1	30
98	A Nanoscale Standard for the Seebeck Coefficient. <i>Nano Letters</i> , 2011, 11, 4679-4681.	4.5	22
99	Thermal conductivity of indium arsenide nanowires with wurtzite and zinc blende phases. <i>Physical Review B</i> , 2011, 83, .	1.1	96
100	Mesoscopic Thermovoltage Measurement Design. , 2011, , .		1
101	Tropfen auf Wanderschaft. <i>Physik in Unserer Zeit</i> , 2011, 42, 110-111.	0.0	0
102	Time-dependent motor properties of multipedal molecular spiders. <i>Physical Review E</i> , 2011, 84, 031111.	0.8	29
103	Effectiveness of beads for tracking small-scale molecular motor dynamics. <i>Physical Review E</i> , 2011, 84, 021907.	0.8	2
104	Thermal resistance of a nanoscale point contact to an indium arsenide nanowire. <i>Applied Physics Letters</i> , 2011, 99, 063110.	1.5	15
105	Tuning the performance of an artificial protein motor. <i>Physical Review E</i> , 2011, 84, 031922.	0.8	9
106	Signatures of Wigner localization in epitaxially grown nanowires. <i>Physical Review B</i> , 2011, 83, .	1.1	28
107	Increasing thermoelectric performance using coherent transport. <i>Physical Review B</i> , 2011, 84, .	1.1	168
108	Toward 3D Integration of 1D Conductors: Junctions of InAs Nanowires. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-5.	1.5	1

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109	Measuring hybridization in GaInAs/InP electron billiard arrays. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1205-1207.	1.3	1
110	A classical Master equation approach to modeling an artificial protein motor. <i>Chemical Physics</i> , 2010, 375, 479-485.	0.9	10
111	Field-orientation dependence of the Zeeman spin splitting in (In,Ga)As quantum point contacts. <i>Physical Review B</i> , 2010, 81, .	1.1	18
112	Biased motion and molecular motor properties of bipedal spiders. <i>Physical Review E</i> , 2010, 81, 021106.	0.8	30
113	Thermoelectric efficiency at maximum power in low-dimensional systems. <i>Physical Review B</i> , 2010, 82, .	1.1	183
114	Investigation of electron wave function hybridization in Ga _{0.25} In _{0.75} As/InP arrays. <i>Applied Physics Letters</i> , 2009, 95, 182105.	1.5	2
115	The fabrication of dense and uniform InAs nanowire arrays. <i>Nanotechnology</i> , 2009, 20, 225304.	1.3	36
116	Mechanochemical model for myosin V. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 18261-18266.	3.3	49
117	Visualization of Thermally Actuated Pumping in the Leidenfrost Regime by Surface Asymmetry. <i>Journal of Heat Transfer</i> , 2009, 131, .	1.2	1
118	Nanoscale Thermometry with a Quantum Dot. <i>Journal of Low Temperature Physics</i> , 2009, 154, 161-171.	0.6	3
119	Intrinsic Seebeck Coefficient of Quantum Dots. <i>Journal of Electronic Materials</i> , 2009, 38, 1163-1165.	1.0	5
120	Measuring Temperature Gradients over Nanometer Length Scales. <i>Nano Letters</i> , 2009, 9, 779-783.	4.5	51
121	Thermal Conductance of InAs Nanowire Composites. <i>Nano Letters</i> , 2009, 9, 4484-4488.	4.5	76
122	The Tumbleweed: Towards a synthetic protein motor. <i>HFSP Journal</i> , 2009, 3, 204-212.	2.5	35
123	Chaotic scattering in nano-electronic systems: from billiards to clusters. <i>International Journal of Nanotechnology</i> , 2009, 6, 408.	0.1	0
124	Quantum conductance fluctuations in semiconductor devices. <i>Current Applied Physics</i> , 2008, 8, 332-335.	1.1	2
125	Feedback control in flashing ratchets. <i>Annalen Der Physik</i> , 2008, 17, 115-129.	0.9	30
126	Determining a temperature differential across a quantum dot. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1605-1607.	1.3	2

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127	Carrier density saturation in a heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1754-1756.	1.3	2
128	Nonlinear characteristics in the magnetoconductance of electron billiards. <i>Current Applied Physics</i> , 2008, 8, 340-342.	1.1	0
129	Enhanced Zeeman splitting in Ga _{0.25} In _{0.75} As quantum point contacts. <i>Applied Physics Letters</i> , 2008, 93, 012105.	1.5	25
130	Nanoscale thermoelectric power generation. , 2008, , . Confinement properties of a $\text{Ga}_{0.25}\text{In}_{0.75}$		0
131	Confinement properties of a $\text{Ga}_{0.25}\text{In}_{0.75}$	1.1	13
132	Multidirectional sorting modes in deterministic lateral displacement devices. <i>Physical Review E</i> , 2008, 78, 046304.	0.8	55
133	Realization of a Feedback Controlled Flashing Ratchet. <i>Physical Review Letters</i> , 2008, 101, 220601.	2.9	91
134	Effect of time delay on feedback control of a flashing ratchet. <i>Europhysics Letters</i> , 2008, 81, 10002.	0.7	55
135	Quantum-dot thermometry. <i>Applied Physics Letters</i> , 2007, 91, 252114.	1.5	16
136	Nanowire-based, high-efficiency thermoelectrics. , 2006, , .		0
137	Power generation with nanowire resonant tunneling thermoelectrics. , 2006, , .		0
138	A novel quantum interference probe of the energy spectrum of coupled nanodevices. <i>Current Applied Physics</i> , 2006, 6, 541-544.	1.1	1
139	Series summation of fractal fluctuations in electron billiard arrays. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 34, 600-603.	1.3	0
140	Self-Propelled Leidenfrost Droplets. <i>Physical Review Letters</i> , 2006, 96, 154502.	2.9	438
141	Concept study for a high-efficiency nanowire based thermoelectric. <i>Nanotechnology</i> , 2006, 17, S338-S343.	1.3	78
142	Unified model of fractal conductance fluctuations for diffusive and ballistic semiconductor devices. <i>Physical Review B</i> , 2006, 73, .	1.1	26
143	Symmetry of magnetoconductance fluctuations of quantum dots in the nonlinear response regime. <i>Physical Review B</i> , 2006, 73, .	1.1	9
144	Mechanical coupling in flashing ratchets. <i>Physical Review E</i> , 2006, 73, 051106.	0.8	31

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145	Experimental Investigation of the Breakdown of the Onsager-Casimir Relations. <i>Physical Review Letters</i> , 2006, 96, 116801.	2.9	52
146	Single-polymer Brownian motor: A simulation study. <i>Physical Review E</i> , 2006, 73, 011909.	0.8	59
147	Quantum, cyclic, and particle-exchange heat engines. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 29, 390-398.	1.3	41
148	Energy-specific equilibrium in nanowires for efficient thermoelectric power generation. <i>Materials Research Society Symposia Proceedings</i> , 2005, 886, 1.	0.1	1
149	Fractal Study of Coupling Transitions in Ballistic Quantum-Dot Arrays. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
150	Preserved Symmetries in Nonlinear Electric Conduction. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
151	Performance characteristics of Brownian motors. <i>Chaos</i> , 2005, 15, 026111.	1.0	71
152	Power optimization in thermionic devices. <i>Journal Physics D: Applied Physics</i> , 2005, 38, 2051-2054.	1.3	80
153	Reversible Thermoelectric Nanomaterials. <i>Physical Review Letters</i> , 2005, 94, 096601.	2.9	312
154	Three key questions on fractal conductance fluctuations: Dynamics, quantization, and coherence. <i>Physical Review B</i> , 2004, 70, .	1.1	14
155	Symmetry of Two-Terminal Nonlinear Electric Conduction. <i>Physical Review Letters</i> , 2004, 92, 046803.	2.9	45
156	Surviving conduction symmetries in non-linear response. <i>Superlattices and Microstructures</i> , 2003, 34, 173-177.	1.4	0
157	The influence of confining wall profile on quantum interference effects in etched Ga _{0.25} In _{0.75} As/InP billiards. <i>Superlattices and Microstructures</i> , 2003, 34, 179-184.	1.4	5
158	Geometry-independence of fractal ballistic processes. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 19, 225-229.	1.3	0
159	PHYSICS: Coherent Power Booster. <i>Science</i> , 2003, 299, 841-842.	6.0	3
160	Applications of Brownian motors. , 2003, , .		0
161	A Review of Fractal Conductance Fluctuations in Ballistic Semiconductor Devices. , 2003, , 277-316.		4
162	Electron Ratchetsâ€™ Nonlinear Transport in Semiconductor Dot and Antidot Structures. , 2003, , 317-361.		3

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163	Dependence of fractal conductance fluctuations on soft-wall profile in a double-layer semiconductor billiard. Applied Physics Letters, 2002, 80, 4381-4383.	1.5	13
164	Diffusion in tilted periodic potentials: Enhancement, universality, and scaling. Physical Review E, 2002, 65, 031104.	0.8	241
165	Reversible Quantum Brownian Heat Engines for Electrons. Physical Review Letters, 2002, 89, 116801.	2.9	304
166	Reversible Electron Heat Engines. AIP Conference Proceedings, 2002, , .	0.3	1
167	Quantum ratchets and quantum heat pumps. Applied Physics A: Materials Science and Processing, 2002, 75, 237-246.	1.1	85
168	Ratches and Brownian motors: Basics, experiments and applications. Applied Physics A: Materials Science and Processing, 2002, 75, 167-167.	1.1	133
169	Quantum ratchets act as heat pumps. Physica B: Condensed Matter, 2002, 314, 464-468.	1.3	7
170	The dependence of fractal conductance fluctuations on semiconductor billiard parameters. Physica B: Condensed Matter, 2002, 314, 477-480.	1.3	0
171	The dependence of fractal conductance fluctuations on soft-wall profile in a double-2DEG billiard. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 841-844.	1.3	1
172	Discrete energy level spectrum dependence of fractal conductance fluctuations in semiconductor billiards. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 683-686.	1.3	1
173	Giant Acceleration of Free Diffusion by Use of Tilted Periodic Potentials. Physical Review Letters, 2001, 87, 010602.	2.9	395
174	<title>Ratchets: muscles, molecules, and quantum heat pumps</title>. , 2001, , .		0
175	Pumping heat with quantum ratchets. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 11, 281-286.	1.3	17
176	Chaos in Quantum Ratchets. Physica Scripta, 2001, T90, 54.	1.2	11
177	Evolution of Fractal Patterns during a Classical-Quantum Transition. Physical Review Letters, 2001, 87, 036802.	2.9	57
178	Semiconductor Billiards ? a Controlled Environment to Study Fractals. Physica Scripta, 2001, T90, 41.	1.2	1
179	Chaos in Quantum Ratchets. , 2001, , .		0
180	Semiconductor Billiards â€“ a Controlled Environment to Study Fractals. , 2001, , .		2

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181	Temperature and size dependence of fractal MCF in semiconductor billiards. <i>Microelectronic Engineering</i> , 2000, 51-52, 241-247.	1.1	0
182	Von DÄmonen und Elektronen: In Quantenratchen flieÄŸen Elektronen hoher und niedriger Energie in entgegengesetzte Richtungen. <i>Physik Journal</i> , 2000, 56, 45-47.	0.1	1
183	Asymmetric nonlinear conductance of quantum dots with broken inversion symmetry. <i>Physical Review B</i> , 2000, 61, 15914-15926.	1.1	47
184	Voltage and temperature limits for the operation of a quantum dot ratchet. <i>Physica B: Condensed Matter</i> , 1999, 272, 61-63.	1.3	6
185	Electron quantum ratchets. <i>Microelectronic Engineering</i> , 1999, 47, 265-267.	1.1	1
186	Experimental Tunneling Ratchets. <i>Science</i> , 1999, 286, 2314-2317.	6.0	276
187	A quantum dot ratchet: Experiment and theory. <i>Europhysics Letters</i> , 1999, 45, 406-406.	0.7	12
188	Experimental Quantum Ratchets based on Solid State Nanostructures. <i>Australian Journal of Physics</i> , 1999, 52, 895.	0.6	1
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190	Nonsymmetric conduction induced by the shape of electron billiards. <i>Semiconductor Science and Technology</i> , 1998, 13, A27-A29.	1.0	2
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