Mark A Reed

List of Publications by Year
in descending order

233 papers	22,316 citations	22146 59 h-index	8393 147 g-index
241 all docs	241 docs citations	241 times ranked	16856 citing authors

#	Article	IF	Citations
1	Conductance of a Molecular Junction. Science, 1997, 278, 252-254.	12.6	3,234
2	Large On-Off Ratios and Negative Differential Resistance in a Molecular Electronic Device. Science, 1999, 286, 1550-1552.	12.6	2,365
3	Label-free immunodetection with CMOS-compatible semiconducting nanowires. Nature, 2007, 445, 519-522.	27.8	1,245
4	Observation of discrete electronic states in a zero-dimensional semiconductor nanostructure. Physical Review Letters, 1988, 60, 535-537.	7.8	952
5	Analysis of yeast protein kinases using protein chips. Nature Genetics, 2000, 26, 283-289.	21.4	810
6	Importance of the Debye Screening Length on Nanowire Field Effect Transistor Sensors. Nano Letters, 2007, 7, 3405-3409.	9.1	716
7	Observation of molecular orbital gating. Nature, 2009, 462, 1039-1043.	27.8	712
8	Mechanism of electron conduction in self-assembled alkanethiol monolayer devices. Physical Review B, 2003, 68, .	3.2	566
9	Molecular random access memory cell. Applied Physics Letters, 2001, 78, 3735-3737.	3.3	536
10	Nanoscale metal/self-assembled monolayer/metal heterostructures. Applied Physics Letters, 1997, 71, 611-613.	3.3	517
11	Label-free biomarker detection from whole blood. Nature Nanotechnology, 2010, 5, 138-142.	31.5	506
12	Room-temperature negative differential resistance in nanoscale molecular junctions. Applied Physics Letters, 2000, 77, 1224-1226.	3.3	480
13	Single Molecule Electronic Devices. Advanced Materials, 2011, 23, 1583-1608.	21.0	426
14	Growth of a single freestanding multiwall carbon nanotube on each nanonickel dot. Applied Physics Letters, 1999, 75, 1086-1088.	3.3	391
15	Observation of Plasmon Propagation, Redirection, and Fan-Out in Silver Nanowires. Nano Letters, 2006, 6, 1822-1826.	9.1	376
16	Inelastic Electron Tunneling Spectroscopy of an Alkanedithiol Self-Assembled Monolayer. Nano Letters, 2004, 4, 643-646.	9.1	364
17	Quantification of the affinities and kinetics of protein interactions using silicon nanowire biosensors. Nature Nanotechnology, 2012, 7, 401-407.	31.5	318
18	Increase of electrospray throughput using multiplexed microfabricated sources for the scalable generation of monodisperse droplets. Journal of Aerosol Science, 2006, 37, 696-714.	3.8	275

#	Article	IF	Citations
19	Computing with Molecules. Scientific American, 2000, 282, 86-93.	1.0	239
20	Synthesis and Preliminary Testing of Molecular Wires and Devices. Chemistry - A European Journal, 2001, 7, 5118-5134.	3.3	236
21	Critical Knowledge Gaps in Mass Transport through Single-Digit Nanopores: A Review and Perspective. Journal of Physical Chemistry C, 2019, 123, 21309-21326.	3.1	234
22	Quantum Dots. Scientific American, 1993, 268, 118-123.	1.0	231
23	Spatial quantization in GaAsâ€“AlGaAs multiple quantum dots. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1986, 4, 358.	1.6	211
24	Field-effect reconfigurable nanofluidic ionic diodes. Nature Communications, 2011, 2, 506.	12.8	211
25	Record High Efficiency Single-Walled Carbon Nanotube/Silicon pâ€“n Junction Solar Cells. Nano Letters, 2013, 13, 95-99.	9.1	193
26	Micromolded PDMS planar electrode allows patch clamp electrical recordings from cells. Biosensors and Bioelectronics, 2002, 17, 597-604.	10.1	186
27	Electronic transport of molecular systems. Chemical Physics, 2002, 281, 127-145.	1.9	172
28	Electronic transport through metalâ€“1,4-phenylene diisocyanideâ€“metal junctions. Chemical Physics Letters, 1999, 313, 741-748.	2.6	158
29	A nanofluidic ion regulation membrane with aligned cellulose nanofibers. Science Advances, 2019, 5, eaau4238.	10.3	148
30	Microfabrication of a mechanically controllable break junction in silicon. Applied Physics Letters, 1995, 67, 1160-1162.	3.3	136
31	Electron tunnelling in self-assembled monolayers. Reports on Progress in Physics, 2005, 68, 523-544.	20.1	136
32	Semiconducting Nanowire Field-Effect Transistor Biomolecular Sensors. IEEE Transactions on Electron Devices, 2008, 55, 3119-3130.	3.0	132
33	Quantization effects in the conductance of metallic contacts at room temperature. Physical Review B, 1996, 53, 1022-1025.	3.2	124
34	Comparison of Electronic Transport Characterization Methods for Alkanethiol Self-Assembled Monolayersâ€. Journal of Physical Chemistry B, 2004, 108, 8742-8750.	2.6	122
35	Realization of a threeâ€terminal resonant tunneling device: The bipolar quantum resonant tunneling transistor. Applied Physics Letters, 1989, 54, 1034-1036.	3.3	120
36	Silicon Nanowire Field-Effect Transistorsâ€”A Versatile Class of Potentiometric Nanobiosensors. IEEE Access, 2015, 3, 287-302.	4.2	117

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37	Elastic and Inelastic Electron Tunneling in Alkane Self-Assembled Monolayers. Journal of Physical Chemistry B, 2004, 108, 18398-18407.	2.6	108
38	Determination of Molecular Configuration by Debye Length Modulation. Journal of the American Chemical Society, 2011, 133, 13886-13889.	13.7	106
39	Electrical characterization of single GaN nanowires. Nanotechnology, 2005, 16, 2941-2953.	2.6	105
40	Optimal signal-to-noise ratio for silicon nanowire biochemical sensors. Applied Physics Letters, 2011, 98, 264107-2641073.	3.3	99
41	Current rectification in a single GaN nanowire with a well-defined pâ€“n junction. Applied Physics Letters, 2003, 83, 1578-1580.	3.3	93
42	Improved efficiency of smooth and aligned single walled carbon nanotube/silicon hybrid solar cells. Energy and Environmental Science, 2013, 6, 879.	30.8	87
43	Inelastic electron tunneling spectroscopy. Materials Today, 2008, 11, 46-50.	14.2	86
44	Microfluidic System for Planar Patch Clamp Electrode Arrays. Nano Letters, 2006, 6, 815-819.	9.1	79
45	Direct Observation of Charge Inversion in Divalent Nanofluidic Devices. Nano Letters, 2015, 15, 5046-5051.	9.1	74
46	Mechanism of Electron Conduction in Self-Assembled Alkanethiol Monolayer Devices. Annals of the New York Academy of Sciences, 2003, 1006, 21-35.	3.8	73
47	Label-free Electronic Detection of the Antigen-Specific T-Cell Immune Response. Nano Letters, 2008, 8, 3310-3314.	9.1	71
48	Voltage gated ion and molecule transport in engineered nanochannels: theory, fabrication and applications. Nanotechnology, 2014, 25, 122001.	2.6	71
49	Molecular Wires, Switches, and Memories. Annals of the New York Academy of Sciences, 2002, 960, 69-99.	3.8	70
50	Visions for a molecular future. Nature Nanotechnology, 2013, 8, 385-389.	31.5	70
51	A Gd@C82 single-molecule electret. Nature Nanotechnology, 2020, 15, 1019-1024.	31.5	70
52	Growth and characterization of aligned carbon nanotubes from patterned nickel nanodots and uniform thin films. Journal of Materials Research, 2001, 16, 3246-3253.	2.6	69
53	Highly specific and sensitive non-enzymatic determination of uric acid in serum and urine by extended gate field effect transistor sensors. Biosensors and Bioelectronics, 2014, 51, 225-231.	10.1	69
54	Resonant tunneling through a double GaAs/AlAs superlattice barrier, single quantum well heterostructure. Applied Physics Letters, 1986, 49, 158-160.	3.3	65

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55	Placement of conjugated oligomers in an alkanethiol matrix by scanned probe microscope lithography. Applied Physics Letters, 1999, 75, 624-626.	3.3	65
56	Coherent Tunneling Transport in Molecular Junctions. Journal of Physical Chemistry C, 2010, 114, 20431-20435.	3.1	63
57	Spin Splitting of Single 0D Impurity States in Semiconductor Heterostructure Quantum Wells. Physical Review Letters, 1996, 76, 1328-1331.	7.8	61
58	Liquid fuel microcombustor using microfabricated multiplexed electrospray sources. Proceedings of the Combustion Institute, 2007, 31, 2239-2246.	3.9	60
59	$hbox{1}/f$ Noise of Silicon Nanowire BioFETs. IEEE Electron Device Letters, 2010, 31, 615-617.	3.9	59
60	Limit of detection of field effect transistor biosensors: Effects of surface modification and size dependence. Applied Physics Letters, 2014, 104, .	3.3	57
61	Suppression of leakage current in Schottky barrier metalâ€“oxideâ€“semiconductor field-effect transistors. Journal of Applied Physics, 2002, 91, 757-759.	2.5	56
62	Electron transport measurements of Schottky barrier inhomogeneities. Applied Physics Letters, 2002, 80, 1761-1763.	3.3	55
63	Synthesis and testing of new end-functionalized oligomers for molecular electronics. Tetrahedron, 2003, 59, 8555-8570.	1.9	55
64	Indium oxide nanostructures. Applied Physics A: Materials Science and Processing, 2006, 85, 233-240.	2.3	52
65	A Nanoelectronic Enzymeâ€Linked Immunosorbent Assay for Detection of Proteins in Physiological Solutions. Small, 2010, 6, 232-238.	10.0	52
66	Direct, Rapid, and Label-Free Detection of Enzymeâ€“Substrate Interactions in Physiological Buffers Using CMOS-Compatible Nanoribbon Sensors. Nano Letters, 2014, 14, 5315-5322.	9.1	52
67	Nanoelectronics: Fanciful physics or real devices?. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1989, 7, 1398.	1.6	51
68	Atomic probes: a search for conduction through a single molecule. Nanotechnology, 1996, 7, 409-411.	2.6	50
69	Size-dependent persistent photocurrent and surface band bending inm-axial GaN nanowires. Physical Review B, 2011, 84, .	3.2	50
70	Electronic properties of InN nanowires. Applied Physics Letters, 2005, 87, 253103.	3.3	49
71	The Electrical Measurement of Molecular Junctions. Annals of the New York Academy of Sciences, 1998, 852, 133-144.	3.8	48
72	Observation of the Linear Stark Effect in a Single Acceptor in Si. Physical Review Letters, 2007, 98, 096805.	7.8	48

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73	Paul trapping of charged particles in aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9326-9330.	7.1	48
74	Electric Field Modulation of the Membrane Potential in Solid-State Ion Channels. Nano Letters, 2012, 12, 6441-6447.	9.1	47
75	Regenerative Electronic Biosensors Using Supramolecular Approaches. ACS Nano, 2013, 7, 4014-4021.	14.6	46
76	Functionalized Polyelectrolytes Assembling on Nanoâ€BioFETs for Biosensing Applications. Advanced Functional Materials, 2015, 25, 2279-2286.	14.9	46
77	Electronic transport in self-assembled alkanethiol monolayers. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 117-125.	2.7	43
78	Specific contact resistivity of nanowire devices. Applied Physics Letters, 2006, 88, 053106.	3.3	43
79	Performance limitations for nanowire/nanoribbon biosensors. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2013, 5, 629-645.	6.1	42
80	Atomic force microscopy study of electron beam written contamination structures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 54.	1.6	41
81	Experimental evidence and control of the bulk-mediated intersurface coupling in topological insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2015, 91, .	3.2	39
82	Electrically Excited Infrared Emission from InN Nanowire Transistors. Nano Letters, 2007, 7, 2276-2280.	9.1	38
83	Molecular scale electronics: syntheses and testing. Nanotechnology, 1998, 9, 246-250.	2.6	36
84	Resonant tunneling through a HgTe/Hg1â^'xCdxTe double barrier, single quantum well heterostructure. Applied Physics Letters, 1986, 49, 1293-1295.	3.3	35
85	Microstructure fabrication and transport through quantum dots. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1988, 6, 302.	1.6	34
86	Investigation of parallel conduction in GaAs/ Al<inf>x</inf>Ga<inf>1-x</inf>As modulation-doped structures in the quantum limit. IEEE Journal of Quantum Electronics, 1986, 22, 1753-1759.	1.9	33
87	Electrical characterization of metalâ€“moleculeâ€“silicon junctions. Superlattices and Microstructures, 2003, 33, 217-226.	3.1	33
88	Pseudomorphic bipolar quantum resonant-tunneling transistor. IEEE Transactions on Electron Devices, 1989, 36, 2328-2334.	3.0	32
89	Multiplexed SOI BioFETs. Biosensors and Bioelectronics, 2011, 28, 239-242.	10.1	32
90	Minority Carrier Lifetimes and Surface Effects in VLSâ€Grown Axial pâ€“n Junction Silicon Nanowires. Advanced Materials, 2011, 23, 4306-4311.	21.0	32

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91	Resonant tunneling in a GaAs/AlGaAs barrier/InGaAs quantum well heterostructure. Applied Physics Letters, 1987, 50, 845-847.	3.3	31
92	Quantitative resonant tunneling spectroscopy: Currentâ€voltage characteristics of precisely characterized resonant tunneling diodes. Applied Physics Letters, 1989, 54, 1256-1258.	3.3	31
93	Recent Advances in Molecular Scale Electronics. Annals of the New York Academy of Sciences, 1998, 852, 197-204.	3.8	30
94	Electronic memory effects in self-assembled monolayer systems. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 17-23.	2.7	30
95	Methods for fabricating Ohmic contacts to nanowires and nanotubes. Journal of Vacuum Science & Technology B, 2006, 24, 231.	1.3	30
96	The effect of Mg doping on GaN nanowires. Nanotechnology, 2006, 17, 5735-5739.	2.6	30
97	Subthreshold and scaling of PtSi Schottky barrier MOSFETs. Superlattices and Microstructures, 2000, 28, 501-506.	3.1	29
98	Prospects for Molecular-Scale Electronics. MRS Bulletin, 2001, 26, 113-120.	3.5	29
99	Hotwiring biosensors. Nature Biotechnology, 2001, 19, 924-925.	17.5	28
100	Electropolymerization on Microelectrodes:Â Functionalization Technique for Selective Protein and DNA Conjugation. Analytical Chemistry, 2006, 78, 6340-6346.	6.5	28
101	Smartphone-Enabled Colorimetric Trinitrotoluene Detection Using Amine-Trapped Polydimethylsiloxane Membranes. ACS Applied Materials & Interfaces, 2017, 9, 14445-14452.	8.0	28
102	Trapping of sub-100 nm nanoparticles using gigahertz acoustofluidic tweezers for biosensing applications. Nanoscale, 2019, 11, 14625-14634.	5.6	28
103	Predictive simulations and optimization of nanowire field-effect PSA sensors including screening. Nanotechnology, 2013, 24, 225503.	2.6	27
104	An RTD/transistor switching block and its possible application in binary and ternary adders. IEEE Transactions on Electron Devices, 1997, 44, 2149-2153.	3.0	26
105	Temperature dependence of 1/f noise mechanisms in silicon nanowire biochemical field effect transistors. Applied Physics Letters, 2010, 97, 243501.	3.3	26
106	Novel Silicon Doped Tin Oxideâ€“Carbon Microspheres as Anode Material for Lithium Ion Batteries: The Multiple Effects Exerted by Doped Si. Small, 2017, 13, 1702614.	10.0	26
107	Electronic Transport in Molecular Self-Assembled Monolayer Devices. Proceedings of the IEEE, 2005, 93, 1815-1824.	21.3	25
108	Quantitative probing of surface charges at dielectricâ€“electrolyte interfaces. Lab on A Chip, 2013, 13, 1431.	6.0	25

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109	Anharmonic oscillator model of a quantum dot nanostructure. Applied Physics Letters, 1989, 54, 1997-1999.	3.3	23
110	Resonant tunneling in double-quantum-well triple-barrier heterostructures. Physical Review B, 1996, 54, 4857-4862.	3.2	23
111	Resonant transmission in the base/collector junction of a bipolar quantumâ€well resonantâ€tunneling transistor. Applied Physics Letters, 1991, 59, 3413-3415.	3.3	22
112	Back under control. Nature Materials, 2004, 3, 286-287.	27.5	22
113	A microfluidic chip with a serpentine channel enabling high-throughput cell separation using surface acoustic waves. Lab on A Chip, 2021, 21, 4608-4617.	6.0	22
114	Continuous Label-Free Electronic Discrimination of T Cells by Activation State. ACS Nano, 2020, 14, 8646-8657.	14.6	21
115	Photoluminescent determination of charge accumulation in resonant tunneling structures. Physical Review Letters, 1989, 62, 1207-1207.	7.8	20
116	Intrinsic charge transport of conjugated organic molecules in electromigrated nanogap junctions. Journal of Applied Physics, 2011, 109, 102419.	2.5	20
117	Nanostructure fabrication of zero-dimensional quantum dot diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1988, 6, 1861.	1.6	19
118	Nanoelectronic Platform for Ultrasensitive Detection of Protein Biomarkers in Serum using DNA Amplification. Analytical Chemistry, 2017, 89, 11325-11331.	6.5	19
119	A long DNA segment in a linear nanoscale Paul trap. Nanotechnology, 2010, 21, 015103.	2.6	18
120	Charge Transfer from Carbon Nanotubes to Silicon in Flexible Carbon Nanotube/Silicon Solar Cells. Small, 2017, 13, 1702387.	10.0	18
121	Effect of local strain on single acceptors in Si. Physical Review B, 2007, 76, .	3.2	17
122	Optoelectronic Signatures of DNA-Based Hybrid Nanostructures. IEEE Nanotechnology Magazine, 2011, 10, 35-43.	2.0	17
123	Electron-spectroscopic study of verticalIn1â^'xGaxAs quantum dots. Physical Review B, 1996, 53, 15727-15737.	3.2	16
124	Complementary metal oxide semiconductor-compatible silicon nanowire biofield-effect transistors as affinity biosensors. Nanomedicine, 2013, 8, 1839-1851.	3.3	16
125	Fabrication of closely spaced quantum dot diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 1348.	1.6	15
126	Intrinsic Electronic Transport through Alkanedithiol Self-Assembled Monolayer. Japanese Journal of Applied Physics, 2005, 44, 523-529.	1.5	15

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127	Metal-coated microfluidic channels: An approach to eliminate streaming potential effects in nano biosensors. Biosensors and Bioelectronics, 2017, 87, 447-452.	10.1	15
128	Cellphone-Enabled Microwell-Based Microbead Aggregation Assay for Portable Biomarker Detection. ACS Sensors, 2018, 3, 432-440.	7.8	15
129	Investigation of the twoâ€dimensional electron gas in HgCdTe by quantum Hall effect measurements. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 2132-2136.	2.1	14
130	Low-dimensional resonant tunnelling and Coulomb blockade: a comparison of fabricated versus impurity confinement. Semiconductor Science and Technology, 1994, 9, 1919-1924.	2.0	14
131	Overcoming the sensitivity vs. throughput tradeoff in Coulter counters: A novel side counter design. Biosensors and Bioelectronics, 2020, 168, 112507.	10.1	14
132	Temperature-dependent thermal conductivity and suppressed Lorenz number in ultrathin gold nanowires. Physical Review B, 2019, 99, .	3.2	13
133	Excited state resonant tunneling in GaAsî—¸AlxGa1â^'xAs double barrier heterostructures. Superlattices and Microstructures, 1986, 2, 65-67.	3.1	12
134	Investigation of quantum well and tunnel barrier growth by resonant tunneling. Journal of Materials Research, 1986, 1, 337-342.	2.6	11
135	Sequential tunneling and spin degeneracy of zero-dimensional states. Physical Review B, 2000, 62, 8240-8248.	3.2	11
136	Electrical Characterization of Metal-Molecule-Silicon Junctions. Annals of the New York Academy of Sciences, 2003, 1006, 36-47.	3.8	11
137	Microfluidic probe: a new tool for integrating microfluidic environments and electronic wafer-probing. Lab on A Chip, 2010, 10, 123-127.	6.0	11
138	Tunneling spectroscopic study of finite superlattices. Applied Physics Letters, 1990, 57, 707-709.	3.3	10
139	Single ascospore detection for the forecasting of Sclerotinia stem rot of canola. Lab on A Chip, 2020, 20, 3644-3652.	6.0	10
140	Improved MBE Growth Of InGaAs-InAlAs Heterostructures For High-Performance Device Applications. Proceedings of SPIE, 1989, , .	0.8	9
141	Spatiotemporal Control over Molecular Delivery and Cellular Encapsulation from Electropolymerized Microâ€and Nanopatterned Surfaces. Advanced Functional Materials, 2009, 19, 2888-2895.	14.9	9
142	Rapid Screen for Antiviral Tâ€Cell Immunity with Nanowire Electrochemical Biosensors. Advanced Materials, 2022, 34, e2109661.	21.0	9
143	Electron transport and localization in HgCdTe metalâ€“insulator semiconductor field effect transistors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 2716-2721.	2.1	8
144	Comparison of laser-ablation and hot-wall chemical vapour deposition techniques for nanowire fabrication. Nanotechnology, 2006, 17, S246-S252.	2.6	8

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145	Tunable Aqueous Virtual Micropore. Small, 2012, 8, 907-912.	10.0	8
146	High magnetic field tunneling transport in a double quantum well-triple barrier resonant tunneling diode. Physica B: Condensed Matter, 1994, 201, 374-379.	2.7	7
147	Electron mobility study of hot-wall CVD GaN and InN nanowires. Brazilian Journal of Physics, 2006, 36, 824-827.	1.4	7
148	Transport spectroscopy of single Pt impurities in silicon using Schottky barrier MOSFETs. Journal of Physics Condensed Matter, 2008, 20, 374125.	1.8	7
149	Non-vanishing ponderomotive AC electrophoretic effect for particle trapping. Nanotechnology, 2011, 22, 245103.	2.6	7
150	Mapping of near field light and fabrication of complex nanopatterns by diffraction lithography. Nanotechnology, 2012, 23, 045301.	2.6	7
151	CMOS biosensor devices and applications. , 2013, , .		7
152	Programmable and Parallel Trapping of Submicron/Nanoscale Particles Using Acoustic Microâ€Pillar Array Chip. Advanced Materials Interfaces, 2021, 8, 2101334.	3.7	7
153	Quantum-well resonant-tunneling transistors. , 0, , .		6
154	<title>Advances in the processing of quantum-coupled devices</title>. , 1990, , .		6
155	Cross-platform characterization of electron tunneling in molecular self-assembled monolayers. Current Applied Physics, 2005, 5, 213-217.	2.4	6
156	Intrinsic Electronic Conduction Mechanisms in Self-Assembled Monolayers. , 2006, , 275-300.		6
157	Special Issue on Nanowire Transistors: Modeling, Device Design, and Technology. IEEE Transactions on Electron Devices, 2008, 55, 2813-2819.	3.0	6
158	Vertical electronic transport in novel semiconductor heterojunction structures. Superlattices and Microstructures, 1988, 4, 741-747.	3.1	5
159	Resonant tunneling in HgCdTe heterostructures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 2619-2622.	2.1	5
160	Spectroscopic study of intraminiband and interminiband tunneling in finite superlattices. Physical Review B, 1995, 51, 10701-10708.	3.2	5
161	There Is Plenty of Room Between Two Atom Contacts. Science, 1996, 272, 1901-1902.	12.6	5
162	Quantitative nanoscale field effect sensors. Journal of Experimental Nanoscience, 2014, 9, 41-50.	2.4	5

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163	Electrostatic gating of ion transport in carbon nanotube porins: A modeling study. Journal of Chemical Physics, 2021, 154, 204704.	3.0	5
164	Resonant tunneling in double superlattice barrier heterostructures. Superlattices and Microstructures, 1987, 3, 111-116.	3.1	4
165	Phonon assisted tunneling in lattice-matched and pseudomorphic resonant tunneling diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 370.	1.6	4
166	Theory of the Fermi-level energy in semiconductor superlattices. Physical Review B, 1991, 44, 5873-5876.	3.2	4
167	Prospects for Semiconductor Quantum Devices. Advances in Chemistry Series, 1994, , 15-42.	0.6	4
168	Controlled IIIâ€“V semiconductor cluster nucleation and epitaxial growth via electronâ€beam lithography. Applied Physics Letters, 1995, 66, 1343-1345.	3.3	4
169	Guest Editorial Special Issue on Nanowire Transistors: Modeling, Device Design, and Technology. IEEE Nanotechnology Magazine, 2008, 7, 643-650.	2.0	4
170	Single-Molecule Devices: Single Molecule Electronic Devices (Adv. Mater. 14/2011). Advanced Materials, 2011, 23, 1576-1576.	21.0	4
171	Electromigration in gold nanowires under AC driving. Applied Physics Letters, 2018, 113, .	3.3	4
172	Molecular-beam epitaxial growth of AlGaAs/(In,Ga) As resonant tunneling structures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1987, 5, 771.	1.6	3
173	Is Resonant Tunneling Transistor a Reality?. Physics Today, 1990, 43, 132-132.	0.3	3
174	Inelastic electron tunneling spectroscopy of molecular transport junctions. Journal of the Korean Physical Society, 2014, 64, 1539-1544.	0.7	3
175	VOC detection using multimode E-nose composed of bulk acoustic wave resonator and silicon nanowire field effect transistor array. , 2016, , .		3
176	Sensing the electrical activity of single ion channels with top-down silicon nanoribbons. Nano Futures, 2018, 2, 025008.	2.2	3
177	Enhancing Lithium Insertion with Electrostatic Nanoconfinement in a Lithography Patterned Precision Cell. ACS Nano, 2019, 13, 8481-8489.	14.6	3
178	GHz Bulk-Acoustic-Wave Resonator Actuated Handheld Ultra-Centrifugal Chip. , 2021, , .		3
179	Molecular Electronics. , 2003, , 123-139.		3
180	Magnetotransport Studies of Weak Localization and Spin-Orbit Scattering in a HgCdTe Two-Dimensional Electron Gas. Japanese Journal of Applied Physics, 1987, 26, 701.	1.5	3

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181	Resonant tunneling through a HgTe/Hg1â^'xCdxTe doubleâ€barrier, singleâ€quantumâ€well heterostructure. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 3147-3149.	2.1	2
182	Quantization of the hall effect in a 3-dimensional quasiperiodic system. Superlattices and Microstructures, 1987, 3, 535-538.	3.1	2
183	Semiconductor quantum dot resonant tunnelling spectroscopy. Semiconductor Science and Technology, 1992, 7, B12-B14.	2.0	2
184	Scanning tunneling microscope images of identifiable quantum dot diodes. Superlattices and Microstructures, 1992, 11, 333-336.	3.1	2
185	Calibration methods for silicon nanowire BioFETs. , 2014, , .		2
186	Rapid Purification, Enrichment, and Detection of Biomolecules Using Bulk Acoustic Wave Resonators. , 2019, , .		2
187	A Fast and Label-Free Potentiometric Method for Direct Detection of Glutamine with Silicon Nanowire Biosensors. Biosensors, 2022, 12, 368.	4.7	2
188	Luminescence excitation mechanisms in CdS from dependence of photoluminescence and thermoluminescence on persistent conductivity stored charge state. Journal of Luminescence, 1984, 31-32, 415-417.	3.1	1
189	Zeeman splitting of single semiconductor impurities in resonant tunneling heterostructures. Superlattices and Microstructures, 1996, 20, 513-522.	3.1	1
190	Large arrays of well-aligned carbon nanotubes. , 1999, , .		1
191	Molecular Scale Electronics. Critical Nanolithography Issues of Synthesis and Addressing. Materials Research Society Symposia Proceedings, 1999, 584, 45.	0.1	1
192	Comment on â€œFabrication of a Molecular Self-Assembled Monolayer Diode Using Nanoimprint Lithographyâ€• Nano Letters, 2004, 4, 533-533.	9.1	1
193	Big science at the nanoscale. Nanotechnology, 2009, 20, 430201-430201.	2.6	1
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