Stephen Goodnick

List of Publications by Year
in descending order

220	4,526	136950 32	133252 59
papers	citations	h-index	g-index

224	224	224	2959
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling of transport in carrierâ€selective contacts in silicon heterojunction solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 490-502.	8.1	3
2	Demonstration and Analysis of Ultrahigh Forward Current Density Diamond Diodes. IEEE Transactions on Electron Devices, 2022, 69, 254-261.	3.0	11
3	Excess noise in high-current diamond diodes. Applied Physics Letters, 2022, 120, .	3.3	12
4	Space charge limited corrections to the power figure of merit for diamond. Applied Physics Letters, 2022, 120, .	3.3	3
5	Gaussian approximation potential for amorphous SiÂ:ÂH. Physical Review Materials, 2022, 6, .	2.4	6
6	Compensation effects on hole transport in C-doped p-type GaPN dilute nitrides. AIP Advances, 2021, 11, 035207.	1.3	0
7	The impact of interfacial Si contamination on GaN-on-GaN regrowth for high power vertical devices. Applied Physics Letters, 2021, 118, .	3.3	14
8	Selective area regrowth and doping for vertical gallium nitride power devices: Materials challenges and recent progress. Materials Today, 2021, 49, 296-323.	14.2	21
9	From Femtoseconds to Gigaseconds: Performance Degradation in Silicon Heterojunction Solar Cells. , 2021, , .		2
10	What is the LCOE of residential solar + battery in the face on increasingly complex utlity rate plans?. , 2021, , .		0
11	From Femtoseconds to Gigaseconds: The SolDeg Platform for the Performance Degradation Analysis of Silicon Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 32424-32434.	8.0	3
12	Role of Hydrogen in the Electronic Properties of a-Si:H/c-Si Heterostructures. Journal of Physical Chemistry C, 2021, 125, 13050-13058.	3.1	2
13	Machine Learning Driven Studies of Performance Degradation in a-Si:H/c-Si Heterojunction Solar Cells. , 2021, , .		0
14	Diamond Schottky p-i-n diodes for high power RF receiver protectors. Solid-State Electronics, 2021, 186, 108154.	1.4	9
15	High Voltage Vertical GaN p-n Diodes With Hydrogen-Plasma Based Guard Rings. IEEE Electron Device Letters, 2020, 41, 127-130.	3.9	49
16	Understanding Transport in Hole Contacts of Silicon Heterojunction Solar Cells by Simulating TLM Structures. IEEE Journal of Photovoltaics, 2020, 10, 363-371.	2.5	13
17	Reverse Leakage Analysis for As-Grown and Regrown Vertical GaN-on-GaN Schottky Barrier Diodes. IEEE Journal of the Electron Devices Society, 2020, 8, 74-83.	2.1	42
18	Calculation of optical response functions of dilute-N GaPAsN lattice-matched to Si. Journal of Applied Physics, 2020, 127, 075703.	2.5	1

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19	Challenges, myths, and opportunities in hot carrier solar cells. Journal of Applied Physics, 2020, 128, .	2.5	21
20	RF Characterization of Diamond Schottky p-i-n Diodes for Receiver Protector Applications. IEEE Microwave and Wireless Components Letters, 2020, 30, 1141-1144.	3.2	15
21	Particle-Based Modeling of Electronâ€“Phonon Interactions. Journal of Heat Transfer, 2020, 142, .	2.1	0
22	Diffusion profiles beneath silicon heterojunction contacts reduce contact resistivity and increase efficiency. , 2020, , .		0
23	High-Temperature Polarization-Free III-Nitride Solar Cells with Self-Cooling Effects. ACS Photonics, 2019, 6, 2096-2103.	6.6	28
24	Kinetic Monte Carlo simulation of transport in amorphous silicon passivation layers in silicon heterojunction solar cells. Journal of Computational Electronics, 2019, 18, 1152-1161.	2.5	6
25	Electronic structure of GaP/Si (001) heterojunctions and the role of hydrogen passivation. Progress in Photovoltaics: Research and Applications, 2019, 27, 724-732.	8.1	3
26	Electronic structure and localized states in amorphous Si and hydrogenated amorphous Si. Physical Chemistry Chemical Physics, 2019, 21, 13248-13257.	2.8	19
27	Neutralizing the polarization effect of diamond diode detectors using periodic forward bias pulses. Diamond and Related Materials, 2019, 94, 162-165.	3.9	9
28	Effects of a defected GaP/Si interface on a Si heterojunction interdigitated back contact (IBC) solar cell. , 2019, , .		0
29	Pore Formation in Silicon Nanoparticle Thin Films and Its Impact on Optical Properties. ACS Applied Energy Materials, 2019, 2, 8587-8595.	5.1	5
30	Analysis of recombination processes in polytype gallium arsenide nanowires. Nano Energy, 2019, 56, 196-206.	16.0	3
31	Nonequilibrium electron and phonon dynamics in advanced concept solar cells. Journal Physics D: Applied Physics, 2019, 52, 093001.	2.8	14
32	Determination of Minority Carrier Lifetime of Holes in Diamond p-i-n Diodes Using Reverse Recovery Method. IEEE Electron Device Letters, 2018, 39, 552-555.	3.9	11
33	Quasi 1D multi-physics modeling of silicon heterojunction solar cells. , 2018, , .		0
34	A Lattice-Matched GaNP/Si Three-Terminal Tandem Solar Cell. , 2018, , .		7
35	Understanding Transport in Heterojunction Contact Stacks by Simulating Silicon Heterojunction TLM Structures. , 2018, , .		2
36	A Multiscale Model to Study Transport in Silicon Heterojunction Solar Cells. , 2018, , .		0

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37	Nanotechnology Pathways to Next-Generation Photovoltaics. Nanostructure Science and Technology, 2018, , 1-36.	0.1	1
38	Focus on electronics, photonics and renewable energy. Nanotechnology, 2018, 29, 360201.	2.6	1
39	Simulation of Phonon Transport in Semiconductors Using a Population-Dependent Many-Body Cellular Monte Carlo Approach. Journal of Heat Transfer, 2017, 139, .	2.1	5
40	Refractory In$_{x}$ Ga1âˆ’$_{x}$ N Solar Cells for High-Temperature Applications. IEEE Journal of Photovoltaics, 2017, 7, 1646-1652.	2.5	26
41	Effective mobility for sequential carrier transport in multiple quantum well structures. Physical Review B, 2017, 96, .	3.2	17
42	Analysis of the reverse I-V characteristics of diamond-based PIN diodes. Applied Physics Letters, 2017, 111, .	3.3	46
43	Stability of alloyed and nonalloyed ohmic contacts to n-type GaN at high temperature in air. Japanese Journal of Applied Physics, 2017, 56, 126502.	1.5	1
44	Modeling of multi-band drift in nanowires using a full band Monte Carlo simulation. Journal of Applied Physics, 2016, 120, .	2.5	4
45	Temperature dependent simulation of diamond depleted Schottky PIN diodes. Journal of Applied Physics, 2016, 119, .	2.5	21
46	Demonstration of Diamond-Based Schottky p-i-n Diode With Blocking Voltage > 500 V. IEEE Electron Device Letters, 2016, 37, 1170-1173.	3.9	16
47	Carrier relaxation and impact ionization in core-shell IIIâ€“V nanowires. , 2016, , .		0
48	Temperature Dependence and High-Temperature Stability of the Annealed Ni/Au Ohmic Contact to p-Type GaN in Air. Journal of Electronic Materials, 2016, 45, 2087-2091.	2.2	10
49	Silica Nanosphere Lithography Defined Light Trapping Structures for Ultra-thin Si Photovoltaics. Materials Research Society Symposia Proceedings, 2015, 1770, 31-36.	0.1	3
50	High temperature characterization of GaAs single junction solar cells. , 2015, , .		14
51	A kinetic Monte Carlo study of defect assisted transport in silicon heterojunction solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1198-1200.	0.8	5
52	IMS2015 Opening and Closing Plenary Sessions. IEEE Microwave Magazine, 2015, 16, 52-59.	0.8	0
53	A Kinetic Monte Carlo approach to study transport in amorphous silicon/crystalline silicon HIT cells. , 2015, , .		7
54	High temperature InGaN solar cell modeling. , 2015, , .		4

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55	Results from coupled optical and electrical sentaurus TCAD models of a gallium phosphide on silicon electron carrier selective contact solar cell. , 2014, , .		16
56	Simulation of electron escape from GaNAs/GaAs quantum well solar cells. , 2014, , .		2
57	Matching AC loads to solar peak production using thermal energy storage in building cooling systems - A case study at Arizona State University. , 2014, , .		1
58	Hot hole transport in a-Si/c-Si heterojunction solar cells. , 2014, , .		7
59	Current degradation due to electromechanical coupling in GaN HEMT's. Microelectronics Journal, 2013, 44, 592-597.	2.0	0
60	Limiting efficiency of silicon based nanostructure solar cells for multiple exciton generation. , 2013, , .		0
61	Advanced tunneling models for solar cell applications. , 2013, , .		1
62	Inducing a junction in n-type InxGa(1â^'x)N. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 03C127.	1.2	0
63	Incorporating 2D quantum effects into full band Monte Carlo simulations of QWFETs. , 2013, , .		0
64	Measurement and effects of polarization fields on one-monolayer-thick InN/GaN multiple quantum wells. Physical Review B, 2013, 88, .	3.2	28
65	Nanoscale Photovoltaics and the Terawatt Challenge. Nanostructure Science and Technology, 2013, , 77-116.	0.1	1
66	Reliability Concerns due to Self-Heating effects in GaN HEMTs. Journal of Integrated Circuits and Systems, 2013, 8, 78-82.	0.4	5
67	Current Degradation in GaN HEMTs: Is Self-Heating Responsible. ECS Transactions, 2012, 49, 103-109.	0.5	1
68	Self-heating and current degradation in 25 nm FD SOI devices with (100) and (110) crystallographic orientation. , 2012, , .		0
69	GaN HEMTs reliability — The role of shielding. , 2012, , .		2
70	Simulating InP-based composite channel p-HEMTs with ultrashort gates for THz applications. , 2012, , .		1
71	Modeling and Simulation of Terahertz Devices. IEEE Microwave Magazine, 2012, 13, 36-44.	0.8	3
72	Current progress in modeling self-heating effects in FD SOI devices and nanowire transistors. Journal of Computational Electronics, 2012, 11, 238-248.	2.5	17

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73	Cellular Monte Carlo study lateral scaling impact of on the DC-RF performance of high-power GaN HEMTs. , 2012, , .		3
74	Reliability of GaN HEMTs: Current degradation in GaN/AlGaN/AlN/GaN HEMT. , 2012, , .		4
75	The interplay of self-heating effects and static RTF in nanowire transistors. , 2012, , .		1
76	Electron drift velocity and mobility calculation in bulk Si using an analytical model for the phonon dispersion. , 2012, , .		0
77	Millimeter-wave power amplifier circuit-device simulations through coupled Harmonic Balance - Monte Carlo particle-based device simulator. , 2012, , .		3
78	Electron drift velocity and mobility calculation in bulk silicon using an analytical model for the phonon dispersions. , 2012, , .		0
79	Study of self-heating effects in SOI and conventional MOSFETs with electro-thermal particle-based device simulator. Journal of Computational Electronics, 2012, 11, 106-117.	2.5	11
80	Is self-heating responsible for the current collapse in GaN HEMTs?. Journal of Computational Electronics, 2012, 11, 129-136.	2.5	14
81	Self-heating and short-range Coulomb interactions due to traps in a 10 nm channel length nanowire transistor. , 2011, , .		1
82	Terahertz-capability nanoscale InGaAs HEMT design guidelines by means of full-band Monte Carlo device simulations. , 2011, , .		0
83	Carrier Dynamics Investigation on Passivation Dielectric Constant and RF Performance of Millimeter-Wave Power GaN HEMTs. IEEE Transactions on Electron Devices, 2011, 58, 3876-3884.	3.0	11
84	Ultrafast carrier relaxation and nonequilibrium phonons in hot carrier solar cells. , 2011, , .		3
85	EXTRACTION OF GATE CAPACITANCE OF HIGH-FREQUENCY AND HIGH-POWER GaN HEMTs BY MEANS OF CELLULAR MONTE CARLO SIMULATIONS. International Journal of High Speed Electronics and Systems, 2011, 20, 423-430.	0.7	1
86	The role of the source and drain contacts on self-heating effect inÂnanowire transistors. Journal of Computational Electronics, 2010, 9, 180-186.	2.5	7
87	Effects of Threading Dislocations on AlGaN/GaN High-Electron Mobility Transistors. IEEE Transactions on Electron Devices, 2010, 57, 353-360.	3.0	97
88	Electrothermal Monte Carlo Simulation of GaN HEMTs Including Electronâ€"Electron Interactions. IEEE Transactions on Electron Devices, 2010, 57, 562-570.	3.0	21
89	Emerging N-Face GaN HEMT Technology: A Cellular Monte Carlo Study. IEEE Transactions on Electron Devices, 2010, 57, 2579-2586.	3.0	8
90	Comparison of N- and Ga-Face GaN HEMTs Through Cellular Monte Carlo Simulations. IEEE Transactions on Electron Devices, 2010, 57, 3348-3354.	3.0	18

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91	Optimizing performance to achieve multiâ€terahertz operating frequencies in pseudomorphic HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2502-2505.	0.8	0
92	RF and DC characterization of state-of-the-art GaN HEMT devices through cellular Monte Carlo simulations. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2445-2449.	0.8	0
93	Aspect Ratio Impact on RF and DC Performance of State-of-the-Art Short-Channel GaN and InGaAs HEMTs. IEEE Electron Device Letters, 2010, , .	3.9	24
94	Semiconductor nanotechnology: novel materials and devices for electronics, photonics and renewable energy applications. Nanotechnology, 2010, 21, 130201.	2.6	9
95	Bias Induced Strain Effects, Short-Range Electron - Electron Interactions and Quantum Effects in AlGaN/GaN HEMTs. , 2009, , .		0
96	Diffusive Transport in Quasi-2D and Quasi-1D Electron Systems. Journal of Computational and Theoretical Nanoscience, 2009, 6, 1725-1753.	0.4	24
97	Thermal Effects in Fully-Depleted SOI Devices. ECS Transactions, 2009, 23, 337-344.	0.5	1
98	Rigid ion model of high field transport in GaN. Journal of Physics Condensed Matter, 2009, 21, 174206.	1.8	21
99	Self-Heating Effects in Nanoscale FD SOI Devices: The Role of the Substrate, Boundary Conditions at Various Interfaces, and the Dielectric Material Type for the BOX. IEEE Transactions on Electron Devices, 2009, 56, 3064-3071.	3.0	47
100	Ballistic Transport in InP-Based HEMTs. IEEE Transactions on Electron Devices, 2009, 56, 2935-2944.	3.0	6
101	Transmission and scarring in graphene quantum dots. Journal of Physics Condensed Matter, 2009, 21, 344203.	1.8	25
102	Physical Modeling of Microwave Transistors Using a Full-Band/Full-Wave Simulation Approach. , 2009, , .		3
103	Transform domain features for ion-channel signal classification using support vector machines. , 2009, , .		2
104	Self-Consistent Simulation of Heating Effects in Nanoscale Devices. , 2009, , .		1
105	Importance of the Gate-Dependent Polarization Charge on the Operation of GaN HEMTs. IEEE Transactions on Electron Devices, 2009, 56, 998-1006.	3.0	26
106	Figures of merit in high-frequency and high-power GaN HEMTs. Journal of Physics: Conference Series, 2009, 193, 012040.	0.4	18
107	Cross-sectional dependence of electron mobility and lattice thermal conductivity in silicon nanowires. Journal of Computational Electronics, 2008, 7, 319-323.	2.5	9
108	Towards the global modeling of InGaAs-based pseudomorphic HEMTs. Journal of Computational Electronics, 2008, 7, 187-191.	2.5	8

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109	Full band Monte Carlo simulation of dislocation effects onÂ250ÂnmÂAlGaN-GaN HEMT. Journal of Computational Electronics, 2008, 7, 244-247.	2.5	0
110	Modeling heating effects in nanoscale devices: theÂpresentÂandÂtheÂfuture. Journal of Computational Electronics, 2008, 7, 66-93.	2.5	34
111	Hot electron effects in ultra-short gate length InAs/InAlAs HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 135-138.	0.8	1
112	Modeling Thermal Effects in Nanodevices. IEEE Transactions on Electron Devices, 2008, 55, 1306-1316.	3.0	107
113	Electron transport in silicon nanowires: The role of acoustic phonon confinement and surface roughness scattering. Journal of Applied Physics, 2008, 104, .	2.5	166
114	Is SOD Technology the Solution to Heating Problems in SOI Devices?. IEEE Electron Device Letters, 2008, 29, 621-624.	3.9	34
115	Transport in Nanostructures. Nanostructure Science and Technology, 2008, , 115-169.	0.1	201
116	Thermoelectric Properties of Silicon Nanowires. , 2008, , .		7
117	Is dual gate device structure better from thermal perspective?. , 2008, , .		1
118	The Upper Limit of the Cutoff Frequency in Ultrashort Gate-Length InGaAs/InAlAs HEMTs: A New Definition of Effective Gate Length. IEEE Electron Device Letters, 2008, 29, 306-308.	3.9	42
119	Simulating Pseudomorphic HEMTs: Optimizing Performance to Achieve Multi-terahertz Operating Frequencies. , 2008, , .		0
120	Ion Conductance of Cylindrical Solid State Nanopores Used in Coulter Counting Experiments. Materials Research Society Symposia Proceedings, 2008, 1092, 20901.	0.1	0
121	Full-band cellular Monte Carlo simulations of terahertz high electron mobility transistors. Journal of Physics Condensed Matter, 2008, 20, 384201.	1.8	5
122	Demonstration of Coulter counting through a cylindrical solid state nanopore. Journal of Physics: Conference Series, 2008, 109, 012028.	0.4	15
123	Semiconductor Device Modeling. Journal of Computational and Theoretical Nanoscience, 2008, 5, 999-1030.	0.4	18
124	CELLULAR MONTE CARLO SIMULATION OF HIGH FIELD TRANSPORT IN SEMICONDUCTOR DEVICES. Selected Topics in Electornics and Systems, 2008, , 21-29.	0.2	0
125	CELLULAR MONTE CARLO SIMULATION OF HIGH FIELD TRANSPORT IN SEMICONDUCTOR DEVICES. International Journal of High Speed Electronics and Systems, 2007, 17, 465-473.	0.7	0
126	Electronic and Thermal Properties of Silicon Nanowires. ECS Transactions, 2007, 6, 159-164.	0.5	0

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127	Monte Carlo simulation of GaN n+nn+ diode including intercarrier interactions. , 2007, , .		1
128	Fabrication of Cylindrical Nanopores and Nanopore Arrays in Silicon-On-Insulator Substrates. Journal of Microelectromechanical Systems, 2007, 16, 1419-1428.	2.5	19
129	Monte Carlo simulation of spin-polarized transport in GaAs nanostructures. , 2007, , .		0
130	Electron Mobility in Silicon Nanowires. IEEE Nanotechnology Magazine, 2007, 6, 113-117.	2.0	76
131	High aspect ratio cylindrical nanopores in silicon-on-insulator substrates. Solid-State Electronics, 2007, 51, 1391-1397.	1.4	12
132	Simulation of Ultrasubmicrometer-Gate $hbox{In}_{0.52} hbox{Al}_{0.48}hbox{As/In}_{0.75}hbox{Ga}_{0.25}hbox{As/In}_{0.52}hbox{Al}_{0.48}hbox{As/InP}$ Pseudomorphic HEMTs Using a Full-Band Monte Carlo Simulator. IEEE Transactions on Electron Devices, 2007, 54, 2327-2338.	3.0	28
133	Global Modeling of high frequency devices. Journal of Computational Electronics, 2007, 5, 415-418.	2.5	8
134	Particle-based simulation: An algorithmic perspective. Journal of Computational Electronics, 2007, 5, 405-410.	2.5	2
135	Integrated electrodes on a silicon based ion channel measurement platform. Biosensors and Bioelectronics, 2007, 23, 183-190.	10.1	30
136	Linear conductance of quantum point contacts with deliberately broken symmetry. Journal of Physics Condensed Matter, 2006, 18, 1715-1724.	1.8	23
137	Carbon nanotubes synthesized by plasma enhanced CVD: Preparation for measurements of their electrical properties for application in pressure sensor. , 2006, , .		0
138	High-field electron transport in AlGaN/GaN heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2564-2568.	0.8	6
139	Frequency analysis of GaN MESFETs using full-band cellular Monte Carlo. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2573-2576.	0.8	5
140	Electron-Phonon Interaction of Wurtzite GaN and Its Effect on High Field Transport. AIP Conference Proceedings, 2005, , .	0.4	0
141	Effects of surface treatment on the velocityâ€"field characteristics of AlGaN/GaN heterostructures. Semiconductor Science and Technology, 2004, 19, S478-S480.	2.0	8
142	Influence of the electronâ€"phonon interaction on electron transport in wurtzite GaN. Semiconductor Science and Technology, 2004, 19, S475-S477.	2.0	32
143	Teflonâ„¢-coated silicon apertures for supported lipid bilayer membranes. Applied Physics Letters, 2004, 85, 3307-3309.	3.3	34
144	Ion Channel Sensor on a Silicon Support. Materials Research Society Symposia Proceedings, 2004, 820, 158.	0.1	2

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145	Quantum Corrected Full-Band Cellular Monte Carlo Simulation of AlGaN/GaN HEMTs. Journal of Computational Electronics, 2004, 3, 299-303.	2.5	22
146	Efficient Memory Management for Cellular Monte Carlo Algorithm. Journal of Computational Electronics, 2004, 3, 323-327.	2.5	0
147	Full-band particle-based simulation of SOI and GOI MOSFETs. Physica Status Solidi (B): Basic Research, 2004, 241, 2297-2302.	1.5	4
148	Nanoelectronic single-electron transistor circuits and architectures. International Journal of Circuit Theory and Applications, 2004, 32, 323-338.	2.0	17
149	Full band Monte Carlo simulations of high-field electron transport in wide band-gap semiconductors. Semiconductor Science and Technology, 2004, 19, S206-S208.	2.0	5
150	Fast Full-Band Device Simulator for Wurtzite and Zincblende GaN MESFET Using a Cellular Monte Carlo Method. Journal of Computational Electronics, 2003, 2, 481-485.	2.5	6
151	Interaction corrections to transport due to quasibound states in open quantum dots. Applied Physics Letters, 2002, 81, 3861-3863.	3.3	6
152	Simulation of Single-Electron Tunneling Circuits. Physica Status Solidi (B): Basic Research, 2002, 233, 113-126.	1.5	4
153	High Field Transport Studies of GaN. Physica Status Solidi A, 2002, 190, 263-270.	1.7	27
154	Buried channel silicon-on-insulator MOSFETs for hot-electron spectroscopy. Physica B: Condensed Matter, 2002, 314, 354-357.	2.7	0
155	Computational electronics. Materials Science and Engineering Reports, 2002, 38, 181-236.	31.8	21
156	Nonlinear transport in quantum point contact structures. Microelectronic Engineering, 2002, 63, 123-127.	2.4	1
157	Particle-based Full-band Approach for Fast Simulation of Charge Transport in Si, GaAs, and InP. VLSI Design, 2002, 15, 743-750.	0.5	0
158	IMPACT IONIZATION AND HIGH FIELD EFFECTS IN WIDE BAND GAP SEMICONDUCTORS. International Journal of High Speed Electronics and Systems, 2001, 11, 511-524.	0.7	3
159	Hybrid Particle-based Full-band Analysis of Ultra-small MOS. VLSI Design, 2001, 13, 125-129.	0.5	0
160	IMPACT IONIZATION AND HIGH FIELD EFFECTS IN WIDE BAND GAP SEMICONDUCTORS. Selected Topics in Electorncs and Systems, 2001, , 149-162.	0.2	0
161	Toward nanoelectronic cellular neural networks. International Journal of Circuit Theory and Applications, 2000, 28, 523-535.	2.0	22
162	Electron energy relaxation in silicon quantum dots by acoustic and optical phonon scattering. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 233-236.	2.7	0

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163	Field effect on the impact ionization rate in semiconductors. Journal of Applied Physics, 2000, 87, 781-788.	2.5	20
164	Neutron irradiation induced degradation of the collectorâ€“emitter offset voltage in InP/InGaAs single heterojunction bipolar transistors. Journal of Applied Physics, 2000, 88, 3765-3767.	2.5	10
165	Acoustic phonon scattering in silicon quantum dots. Nanotechnology, 1999, 10, 142-146.	2.6	8
166	Effect of intercarrier scattering on intersubband transitions in GaAs/AlGaAs quantum well systems. Physica B: Condensed Matter, 1999, 272, 230-233.	2.7	3
167	Full-wave electromagnetic simulation of millimeter-wave active devices and circuits. Annales Des Telecommunications/Annals of Telecommunications, 1999, 54, 30-42.	2.5	1
168	Hole initiated impact ionization in wide band gap semiconductors. Journal of Applied Physics, 1999, 86, 4458-4463.	2.5	22
169	3D simulation of GaAs/AlGaAs quantum dot point contact structures. Semiconductor Science and Technology, 1998, 13, A37-A40.	2.0	10
170	Interface effects on intersubband carrier relaxation in GaAs/AlGaAs quantum wells. Semiconductor Science and Technology, 1998, 13, A143-A146.	2.0	4
171	High-field transport and electroluminescence in ZnS phosphor layers. Journal of Applied Physics, 1998, 83, 3176-3185.	2.5	64
172	Monte Carlo Simulations of High Field Transport in Electroluminescent Devices. VLSI Design, 1998, 8, 401-405.	0.5	0
173	3D Parallel Monte Carlo Simulation of GaAs MESFETs. VLSI Design, 1998, 6, 273-276.	0.5	1
174	Modeling of Radiation Fields in a Sub-Picosecond Photo-Conducting System. VLSI Design, 1998, 8, 407-412.	0.5	6
175	Temporal instabilities in the far-from-equilibrium transport of quantum point contacts. Europhysics Letters, 1997, 39, 73-78.	2.0	8
176	Effect of indirect Î“-L and Î“-X transfer on the carrier dynamics of InGaP/InAlP multiple quantum wells. Applied Physics Letters, 1997, 70, 102-104.	3.3	7
177	Monte Carlo Studies of Intersubband Relaxation in Wide GaAs/AlGaAs Quantum Wells. Physica Status Solidi (B): Basic Research, 1997, 204, 170-173.	1.5	5
178	Impact ionization rate and highâ€field transport in ZnS with nonlocal band structure. Journal of Applied Physics, 1996, 80, 5054-5060.	2.5	22
179	Monte Carlo simulation of intersubband relaxation in wide, uniformly dopedGaAs/AlxGa1â^'xAsquantum wells. Physical Review B, 1996, 54, 17794-17804.	3.2	49
180	Parallel implementation of a Monte Carlo particle simulation coupled to Maxwell's equations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1995, 8, 205-219.	1.9	14

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181	Evidence for bandâ€toâ€band impact ionization in evaporated ZnS:Mn alternatingâ€current thinâ€film electroluminescent devices. Journal of Applied Physics, 1995, 77, 2719-2724.	2.5	23
182	Microscopic calculation of the electronâ€"optical-phonon interaction in ultrathin GaAs/AlxGa1â^'xAs alloy quantum-well systems. Physical Review B, 1995, 51, 7046-7057.	3.2	43
183	Intersubband relaxation of hot excitons in GaAs quantum wells. Semiconductor Science and Technology, 1994, 9, 733-735.	2.0	2
184	Femtosecond dynamics of non-thermal holes in n-modulation-doped quantum wells. Semiconductor Science and Technology, 1994, 9, 449-452.	2.0	0
185	Negative differential conductance in a lateral hot-electron device. Semiconductor Science and Technology, 1994, 9, 922-925.	2.0	0
186	Negative differential conductance in quantum waveguides. Physical Review B, 1994, 50, 14639-14642.	3.2	20
187	Hot-electron bistability in quantum-dot structures. Physical Review B, 1993, 48, 9150-9153.	3.2	15
188	Monte Carlo simulation of electron transport in alternatingâ€current thinâ€film electroluminescent devices. Journal of Applied Physics, 1993, 73, 3390-3395.	2.5	71
189	Reduced carrier cooling and thermalization in semiconductor quantum wires. Physical Review B, 1993, 47, 1632-1635.	3.2	26
190	Intersubband relaxation of heavy-hole excitons in GaAs quantum wells. Physical Review B, 1993, 47, 10943-10946.	3.2	18
191	Waveguide effects in quantum wires with doubleâ€bend discontinuities. Journal of Applied Physics, 1993, 74, 4590-4597.	2.5	20
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