

# David Ferry

## List of Publications by Year in descending order

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264  
papers

6,805  
citations

71102

41  
h-index

88630

70  
g-index

274  
all docs

274  
docs citations

274  
times ranked

3734  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface roughness at the Si(100)-SiO <sub>2</sub> interface. Physical Review B, 1985, 32, 8171-8186.	3.2	514
2	Self-consistent study of the resonant-tunneling diode. Physical Review B, 1989, 39, 7720-7735.	3.2	417
3	Monte Carlo investigation of the electron-hole-interaction effects on the ultrafast relaxation of hot photoexcited carriers in GaAs. Physical Review B, 1987, 36, 6018-6032.	3.2	189
4	Recent advances in Wigner function approaches. Applied Physics Reviews, 2018, 5, 041104.	11.3	159
5	Unified particle approach to Wigner-Boltzmann transport in small semiconductor devices. Physical Review B, 2004, 70, .	3.2	146
6	Lead-Orientation-Dependent Wave Function Scarring in Open Quantum Dots. Physical Review Letters, 1999, 82, 4691-4694.	7.8	131
7	Wave Function Scarring Effects in Open Stadium Shaped Quantum Dots. Physical Review Letters, 1997, 79, 123-126.	7.8	127
8	First-order optical and intervalley scattering in semiconductors. Physical Review B, 1976, 14, 1605-1609.	3.2	125
9	Magnetotransport fluctuations in regular semiconductor ballistic quantum dots. Physical Review B, 1996, 54, 17705-17715.	3.2	125
10	Nanowires in Nanoelectronics. Science, 2008, 319, 579-580.	12.6	110
11	Velocity saturation in intrinsic graphene. Journal of Physics Condensed Matter, 2009, 21, 344201.	1.8	109
12	Time-resolved Raman studies of the decay of the longitudinal optical phonons in wurtzite GaN. Applied Physics Letters, 1998, 72, 2132-2134.	3.3	101
13	Subpicosecond time-resolved Raman studies of LO phonons in GaN: Dependence on photoexcited carrier density. Applied Physics Letters, 2006, 89, 112111.	3.3	100
14	Electron transport properties of a strained Si layer on a relaxed Si <sub>1-x</sub> Gex substrate by Monte Carlo simulation. Applied Physics Letters, 1993, 62, 2661-2663.	3.3	92
15	Pattern transfer to silicon by microcontact printing and RIE. Nanotechnology, 1996, 7, 447-451.	2.6	84
16	The onset of quantization in ultra-submicron semiconductor devices. Superlattices and Microstructures, 2000, 27, 61-66.	3.1	83
17	Einselection in Action: Decoherence and Pointer States in Open Quantum Dots. Physical Review Letters, 2004, 93, 026803.	7.8	74
18	Investigation of ballistic transport through resonant-tunnelling quantum wells using wigner function approach. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1985, 134, 36-40.	0.9	72

#	ARTICLE	IF	CITATIONS
19	Tunneling and Nonhyperbolicity in Quantum Dots. <i>Physical Review Letters</i> , 2002, 88, 236804.	7.8	72
20	Intrinsic mobility in graphene. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 232204.	1.8	71
21	Observation of large electron drift velocities in InN by ultrafast Raman spectroscopy. <i>Applied Physics Letters</i> , 2005, 86, 222103.	3.3	70
22	Scattering states and distribution functions for microstructures. <i>Physical Review B</i> , 1987, 36, 5953-5959.	3.2	68
23	Imaging of integer quantum Hall edge state in a quantum point contact via scanning gate microscopy. <i>Physical Review B</i> , 2005, 72, .	3.2	65
24	Hot-phonon effects and interband relaxation processes in photoexcited GaAs quantum wells. <i>Physical Review B</i> , 1989, 39, 1180-1187.	3.2	64
25	Electron-electron interaction and high field transport in Si. <i>Applied Physics Letters</i> , 1985, 46, 594-596.	3.3	60
26	Phonon-assisted ballistic to diffusive crossover in silicon nanowire transistors. <i>Journal of Applied Physics</i> , 2005, 98, 094303.	2.5	59
27	Interference and interactions in open quantum dots. <i>Reports on Progress in Physics</i> , 2003, 66, 583-632.	20.1	58
28	Pseudopotential-based studies of electron transport in graphene and graphene nanoribbons. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 473202.	1.8	58
29	Time-resolved Raman scattering of nonequilibrium LO phonons in GaAs quantum wells. <i>Physical Review B</i> , 1989, 39, 1446-1449.	3.2	57
30	Ferroelectric-Domain-Patterning-Controlled Schottky Junction State in Monolayer $\text{MoS}_2$ . <i>Physical Review Letters</i> , 2017, 118, 236801.	7.8	57
31	Effect of multi-ion screening on the electronic transport in doped semiconductors: A molecular-dynamics analysis. <i>Physical Review B</i> , 1991, 43, 9734-9739.	3.2	56
32	The persistence of eigenstates in open quantum dots. <i>Applied Physics Letters</i> , 2002, 81, 129-131.	3.3	53
33	Efficient quantum three-dimensional modeling of fully depleted ballistic silicon-on-insulator metal-oxide-semiconductor field-effect-transistors. <i>Journal of Applied Physics</i> , 2004, 95, 7954-7960.	2.5	53
34	Room temperature carrier transport in graphene. <i>Journal of Computational Electronics</i> , 2009, 8, 43-50.	2.5	52
35	Nonequilibrium phonon dynamics and electron distribution functions in InP and InAs. <i>Physical Review B</i> , 1996, 53, 9847-9851.	3.2	50
36	Magnitude of the threshold energy for hot electron damage in metal-oxide-semiconductor field effect transistors by hydrogen desorption. <i>Applied Physics Letters</i> , 1999, 75, 3147-3149.	3.3	48

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37	Effective potentials and the onset of quantization in ultrasmall MOSFETs. Superlattices and Microstructures, 2000, 28, 419-423.	3.1	46
38	Modeling of Quantum Transport in Semiconductor Devices. Solid State Physics, 1996, , 283-448.	0.5	45
39	Exploiting intervalley scattering to harness hot carriers in III-V solar cells. Nature Energy, 2020, 5, 336-343.	39.5	45
40	High field transport in GaN/AlGaN heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2045.	1.6	44
41	Open quantum dotsâ€”probing the quantum to classical transition. Semiconductor Science and Technology, 2011, 26, 043001.	2.0	44
42	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
43	Electronâ€”hole interaction and highâ€”field transport of photoexcited electrons in GaAs. Journal of Applied Physics, 1987, 61, 5330-5336.	2.5	40
44	Scanning gate microscopy investigations on an InGaAs quantum point contact. Applied Physics Letters, 2005, 87, 223501.	3.3	39
45	Draining of the Sea of Chaos: Role of Resonant Transmission and Reflection in an Array of Billiards. Physical Review Letters, 2007, 98, 204101.	7.8	38
46	Coupling-Induced Bipartite Pointer States in Arrays of Electron Billiards: Quantum Darwinism in Action?. Physical Review Letters, 2008, 101, 024102.	7.8	38
47	Energy-gap narrowing and state filling in semiconductors under intense laser irradiation. Physical Review B, 1978, 18, 7033-7037.	3.2	37
48	25 nm chromium oxide lines by scanning tunneling lithography in air. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1994, 12, 3720.	1.6	35
49	Electronâ€”phonon interactions in the wide bandâ€”gap semiconductor GaN. Applied Physics Letters, 1995, 67, 1757-1759.	3.3	35
50	Collision retardation and its role in femtosecond-laser excitation of semiconductor plasmas. Physical Review Letters, 1991, 67, 633-635.	7.8	34
51	Magnetically switched quantum waveguide qubit. Applied Physics Letters, 2001, 79, 2214-2215.	3.3	34
52	3D Simulations of Ultra-small MOSFETs with Real-space Treatment of the Electron â€” Electron and Electron-ion Interactions. VLSI Design, 2000, 10, 437-452.	0.5	33
53	Electron spin filter based on Rashba spin-orbit coupling. Applied Physics Letters, 2006, 89, 172115.	3.3	33
54	Effect of Magnetic Fields on Impact Ionization Rates and Instabilities in InSb. Physical Review, 1968, 169, 670-673.	2.7	30

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55	Electron velocity overshoot and nonequilibrium phonons in a GaAs-based p-i-n nanostructure studied by transient subpicosecond Raman spectroscopy. <i>Physical Review B</i> , 1996, 53, 9838-9846.	3.2	29
56	Fast Energy Relaxation of Hot Carriers Near the Dirac Point of Graphene. <i>Nano Letters</i> , 2013, 13, 4305-4310.	9.1	29
57	Wigner transport models of the electron-phonon kinetics in quantum wires. <i>Physical Review B</i> , 2006, 74, .	3.2	28
58	Simulation of Ultrasubmicrometer-Gate $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_{0.75}\text{Ga}_{0.25}\text{As}/\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{InP}$ Pseudomorphic HEMTs Using a Full-Band Monte Carlo Simulator. <i>IEEE Transactions on Electron Devices</i> , 2007, 54, 2327-2338.	3.0	28
59	The transport and quantum capacitance properties of epitaxial graphene. <i>Applied Physics Letters</i> , 2010, 96, 162101.	3.3	28
60	Absorbing boundary conditions for the simulation of quantum transport phenomena. <i>Transport Theory and Statistical Physics</i> , 1989, 18, 331-346.	0.4	27
61	Initial oxidation of silicon (100): A unified chemical model for thin and thick oxide growth rates and interfacial structure. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995, 13, 1618.	1.6	27
62	Collision-duration time for optical-phonon emission in semiconductors. <i>Physical Review B</i> , 1996, 53, 3846-3855.	3.2	27
63	Three-dimensional simulations of ultrasmall metal-oxide semiconductor field-effect transistors: The role of the discrete impurities on the device terminal characteristics. <i>Journal of Applied Physics</i> , 2002, 91, 3737-3740.	2.5	27
64	Magnetically and electrically tunable semiconductor quantum waveguide inverter. <i>Applied Physics Letters</i> , 2002, 81, 4284-4286.	3.3	27
65	Field-induced nonequilibrium electron distribution and electron transport in a high-quality InN thin film grown on GaN. <i>Applied Physics Letters</i> , 2004, 84, 3681-3683.	3.3	27
66	Nonergodicity and microscopic symmetry breaking of the conductance fluctuations in disordered mesoscopic graphene. <i>Physical Review B</i> , 2012, 86, .	3.2	27
67	Large capacitance in the nanosecond-scale transient response of quantum point contacts. <i>Applied Physics Letters</i> , 2006, 89, 083103.	3.3	26
68	In search of a true hot carrier solar cell. <i>Semiconductor Science and Technology</i> , 2019, 34, 044001.	2.0	26
69	Electron velocity overshoot in a GaAs-based p-i-n nanostructure semiconductor observed by transient subpicosecond Raman spectroscopy. <i>Applied Physics Letters</i> , 1995, 67, 1760-1762.	3.3	25
70	Coupling-driven transition from multiple to single-dot interference in open quantum-dot arrays. <i>Physical Review B</i> , 2001, 64, .	3.2	25
71	Physical scales in the Wigner-Boltzmann equation. <i>Annals of Physics</i> , 2013, 328, 220-237.	2.8	25
72	Decay of polar-optical phonons in semiconductors. <i>Physical Review B</i> , 1974, 9, 4277-4280.	3.2	24

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73	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
74	Partial-trace-free time-convolutionless equation of motion for the reduced density matrix. Physical Review E, 2002, 66, 016131.	2.1	23
75	Imaging of quantum interference patterns within a quantum point contact. Applied Physics Letters, 2006, 89, 242109.	3.3	23
76	Issues in general quantum transport with complex potentials. Applied Physics Letters, 1999, 74, 582-584.	3.3	22
77	Quantum-interference effects of edge channels in the presence of an antidot potential. Physical Review B, 1993, 48, 8152-8155.	3.2	21
78	Transient picosecond Raman studies of high-field electron transport in GaAs-based p-i-n nanostructure semiconductors. Physical Review B, 1995, 51, 1631-1641.	3.2	21
79	Memory effects and nonequilibrium transport in open many-particle quantum systems. Physical Review E, 2003, 67, 066122.	2.1	21
80	Einselection and the quantum to classical transition in quantum dots. Journal of Physics Condensed Matter, 2005, 17, S1017-S1036.	1.8	21
81	Short-range potential scattering and its effect on graphene mobility. Journal of Computational Electronics, 2013, 12, 76-84.	2.5	21
82	Challenges, myths, and opportunities in hot carrier solar cells. Journal of Applied Physics, 2020, 128, .	2.5	21
83	Quantum molecular dynamics treatment for the electronic relaxation of high-density plasmas in two-dimensional structures. Applied Physics Letters, 1991, 58, 2369-2371.	3.3	20
84	Oxidation of silicon (100): Experimental data versus a unified chemical model. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2840.	1.6	20
85	Open system evolution and "memory dressing". Physical Review A, 2004, 69, .	2.5	19
86	Magnetically induced Bragg scattering of electrons in quantum-dot crystals. Physical Review B, 2004, 70, .	3.2	19
87	Spectroscopy of a silicon quantum dot. Applied Physics Letters, 1999, 74, 1576-1578.	3.3	18
88	Some Considerations on Nanowires in Nanoelectronics. IEEE Transactions on Electron Devices, 2008, 55, 2820-2826.	3.0	18
89	Figures of merit in high-frequency and high-power GaN HEMTs. Journal of Physics: Conference Series, 2009, 193, 012040.	0.4	18
90	Robust mesoscopic fluctuations in disordered graphene. Applied Physics Letters, 2012, 101, 093110.	3.3	18

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91	Quantum transport beyond DC. Journal of Computational Electronics, 2013, 12, 317-330.	2.5	18
92	Negative Differential Conductance & Hot-Carrier Avalanching in Monolayer WS <sub>2</sub> FETs. Scientific Reports, 2017, 7, 11256.	3.3	18
93	Direct measurements of the lifetimes of longitudinal optical phonon modes and their dynamics in InN. Applied Physics Letters, 2007, 90, 152107.	3.3	17
94	Ohm's Law in a Quantum World. Science, 2012, 335, 45-46.	12.6	17
95	Gated-region transport in the quantum Hall effect. Physical Review B, 1993, 48, 8840-8847.	3.2	16
96	Picosecond Raman Studies of the Electron-Phonon Interactions in Al <sub>x</sub> Ga <sub>1-x</sub> As: Nonmonotonic Dependence upon the Alloy Composition. Physical Review Letters, 1998, 80, 4807-4810.	7.8	16
97	Magnetically induced suppression of phase breaking in ballistic mesoscopic billiards. Physical Review B, 1997, 55, 1368-1371.	3.2	15
98	Phase breaking and energy relaxation in open quantum-dot arrays. Physical Review B, 2000, 62, 15356-15358.	3.2	15
99	Confinement-induced enhancement of electron-electron interactions in open quantum-dot arrays. Physical Review B, 2001, 63, .	3.2	15
100	Electron transport in some transition metal di-chalcogenides: MoS <sub>2</sub> and WS <sub>2</sub> . Semiconductor Science and Technology, 2017, 32, 085003.	2.0	15
101	Memristor Equations: Incomplete Physics and Undefined Passivity/Activity. Fluctuation and Noise Letters, 2017, 16, 1771001.	1.5	15
102	Tunneling spectroscopy of a quantum resonator. Journal of Applied Physics, 1992, 72, 5001-5003.	2.5	14
103	Indium arsenide quantum wire trigate metal oxide semiconductor field effect transistor. Journal of Applied Physics, 2006, 99, 054503.	2.5	14
104	The role of intervalley phonons in hot carrier transfer and extraction in type-II InAs/AlAsSb quantum-well solar cells. Semiconductor Science and Technology, 2019, 34, 094001.	2.0	14
105	Observation of negative differential conductivity in a FET with structured gate. European Physical Journal B, 1987, 67, 449-452.	1.5	13
106	Monte Carlo investigation of carrier-carrier effects in femtosecond pump and probe experiments. Applied Physics Letters, 1993, 62, 2883-2885.	3.3	13
107	Calculation of the average interface field in inversion layers using zero-temperature Green's function formalism. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 1841.	1.6	13
108	Phase Breaking as a Probe of the Intrinsic Level Spectrum of Open Quantum Dots. Physica Status Solidi (B): Basic Research, 1997, 204, 314-317.	1.5	13

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109	Study of quantum point contact via low temperature scanning gate microscopy. Journal of Physics: Conference Series, 2006, 38, 79-82.	0.4	13
110	Cascade of Y-shaped spin filters in InGaAs/InAs/InGaAs quantum wells. Journal of Applied Physics, 2008, 104, 066106.	2.5	13
111	A two-terminal nanocrystalline silicon memory device at room temperature. Semiconductor Science and Technology, 1998, 13, 1328-1332.	2.0	12
112	Quantum waveguide array generator for performing Fourier transforms: Alternate route to quantum computing. Applied Physics Letters, 2001, 79, 2823-2825.	3.3	12
113	Dephasing due to coupling to the external environment in open quantum-dot arrays. Journal of Physics Condensed Matter, 2005, 17, L351-L357.	1.8	12
114	Studies of electron-phonon and phonon-phonon interactions in InN using ultrafast Raman spectroscopy. Journal of Physics Condensed Matter, 2009, 21, 174202.	1.8	12
115	Information entropy and thermal entropy: apples and oranges. Journal of Computational Electronics, 2018, 17, 43-50.	2.5	12
116	Transient subpicosecond Raman studies of electron velocity overshoot in an InP nanowire nanostructure semiconductor. Applied Physics Letters, 1996, 69, 3575-3577.	3.3	11
117	Open Problems in Quantum Simulation in Ultra-Submicron Devices. VLSI Design, 1998, 8, 165-172.	0.5	11
118	Quasi-one-dimensional transport characteristics of ridge-type InGaAs quantum-wire field-effect transistors. Applied Physics Letters, 2001, 79, 371-373.	3.3	11
119	Fully Quantum Mechanical Simulations of Gated Silicon Quantum Wire Structures: Investigating the Effects of Changing Wire Cross-Section on Transport. Journal of Physics: Conference Series, 2006, 38, 87-90.	0.4	11
120	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
121	Dynamics of Current, Charge and Mass. Computational and Mathematical Biophysics, 2017, 5, 78-115.	1.1	11
122	Wigner equation for general electromagnetic fields: The Weyl-Stratonovich transform. Physical Review B, 2019, 99, .	3.2	11
123	A review of quantum transport in field-effect transistors. Semiconductor Science and Technology, 2022, 37, 043001.	2.0	11
124	Catalyzed $\text{HF}$ Vapor Etching of Silicon Dioxide for Micro- and Nanolithographic Masks. Journal of the Electrochemical Society, 1995, 142, 1199-1205.	2.9	10
125	Transient picosecond/subpicosecond Raman scattering studies of nonequilibrium electron distributions and phonons in CdTe. Journal of Applied Physics, 1996, 80, 3840-3843.	2.5	10
126	Giant back-scattering resonances in edge-state transport through quantum dots. Physical Review B, 1997, 56, 7477-7484.	3.2	10



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127	Pulsed measurements of the nonlinear conductance of quantum point contacts. Applied Physics Letters, 2007, 90, 043103.	3.3	10
128	Linear and nonlinear conductance of ballistic quantum wires with hybrid confinement. Journal of Applied Physics, 2008, 103, 013701.	2.5	10
129	Phase-space functions: can they give a different view of quantum mechanics?. Journal of Computational Electronics, 2015, 14, 864-868.	2.5	10
130	Relativistic Wigner functions in transition metal dichalcogenides. Journal of Computational Electronics, 2018, 17, 110-117.	2.5	10
131	Observation of nonequilibrium longitudinal optical phonons in InN and its implications. Applied Physics Letters, 2004, 84, 3849-3851.	3.3	9
132	Generation of highly spin-polarized currents in cascaded InAs spin filters. Journal of Applied Physics, 2009, 105, .	2.5	9
133	Non-equilibrium longitudinal optical phonons and their lifetimes. Applied Physics Reviews, 2021, 8, .	11.3	9
134	50-fs-matched system for low-temperature measurements of the time-resolved conductance of low-dimensional semiconductors. Review of Scientific Instruments, 2005, 76, 113905.	1.3	8
135	Towards the global modeling of InGaAs-based pseudomorphic HEMTs. Journal of Computational Electronics, 2008, 7, 187-191.	2.5	8
136	Why engineers are right to avoid the quantum reality offered by the orthodox theory? [point of view]. Proceedings of the IEEE, 2021, 109, 955-961.	21.3	8
137	QUANTUM TRANSPORT IN SEMICONDUCTOR DEVICES. International Journal of High Speed Electronics and Systems, 2001, 11, 363-385.	0.7	7
138	Quantum transport and memory effects in mesoscopic structures. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 71-76.	2.7	7
139	Open-system nonequilibrium Green's functions and quantum transport in the transient regime. Semiconductor Science and Technology, 2004, 19, S220-S222.	2.0	7
140	Classical and quantum mechanical transport simulations in open quantum dots. Journal of Computational Electronics, 2007, 6, 93-96.	2.5	7
141	<i>Quo Vadis</i> Nanoelectronics?. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 17-22.	0.8	7
142	Wavepacket phase-space quantum Monte Carlo method. Journal of Computational Electronics, 2021, 20, 267-273.	2.5	7
143	Effects of multi-ion impurity scattering on electron velocities in bulk GaAs. Semiconductor Science and Technology, 1992, 7, B319-B321.	2.0	6
144	Subpicosecond Time-Resolved Raman Studies of Non-Equilibrium Excitations in Wide Bandgap GaN. Physica Status Solidi (B): Basic Research, 1997, 204, 106-109.	1.5	6

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145	Modeling of Submicron Si $_{1-x}$ Gex-Based MOSFETs by Self-Consistent Monte Carlo Simulation. <i>Physica Status Solidi (B): Basic Research</i> , 1997, 204, 531-533.	1.5	6
146	Interaction corrections to transport due to quasibound states in open quantum dots. <i>Applied Physics Letters</i> , 2002, 81, 3861-3863.	3.3	6
147	Large electric-field induced electron drift velocity observed in an In $_x$ Ga $_{1-x}$ As-based semiconductor nanostructure at T=300 K. <i>Applied Physics Letters</i> , 2003, 83, 1438-1440.	3.3	6
148	High-field electron transport in AlGa $_N$ /Ga $_N$ heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 2564-2568.	0.8	6
149	Subpicosecond Raman studies of electric-field-induced optical phonon instability in an In $_{0.53}$ Ga $_{0.47}$ As-based semiconductor nanostructure. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 7961-7974.	1.8	6
150	Electron-density dependence of longitudinal-optical phonon lifetime in In $_N$ studied by subpicosecond time-resolved Raman spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 236219.	1.8	6
151	Ballistic Transport in InP-Based HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2009, 56, 2935-2944.	3.0	6
152	Transport in graphene on BN and SiC. , 2012, , .		6
153	Conductance fluctuations in graphene nanoribbons. <i>Journal of Computational Electronics</i> , 2014, 13, 950-959.	2.5	6
154	Conductance fluctuations in graphene in the presence of long-range disorder. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 135302.	1.8	6
155	Investigating Quantum Coherence by Negative Excursions of the Wigner Quasi-Distribution. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1344.	2.5	6
156	Valley polarized conductance quantization in bilayer graphene narrow quantum point contact. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	6
157	An Introduction to Quantum Transport in Semiconductors. , 0, , .		6
158	Greenâ€™s function approach for transport calculation in a In $_{0.53}$ Ga $_{0.47}$ As/In $_{0.52}$ Al $_{0.48}$ As modulation-doped heterostructure. <i>Journal of Applied Physics</i> , 2003, 93, 3359-3363.	2.5	5
159	Spin polarization in GaAs/Al $_{0.24}$ Ga $_{0.76}$ As heterostructures. <i>Molecular Simulation</i> , 2005, 31, 797-800.	2.0	5
160	Subpicosecond time-resolved Raman studies of electronâ€™longitudinal optical phonon interactions in In $_N$ . <i>Applied Physics Letters</i> , 2007, 90, 172108.	3.3	5
161	The Rashba effect and non-Abelian phases in quantum wire devices. <i>Journal of Computational Electronics</i> , 2007, 6, 101-104.	2.5	5
162	Full-band cellular Monte Carlo simulations of terahertz high electron mobility transistors. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 384201.	1.8	5

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163	Use of the scattering matrix for device simulations. <i>Journal of Computational Electronics</i> , 2013, 12, 356-362.	2.5	5
164	Reversing hot-carrier energy-relaxation in graphene with a magnetic field. <i>Applied Physics Letters</i> , 2014, 104, 193115.	3.3	5
165	Probing the quantum-classical connection with open quantum dots. <i>Physica Scripta</i> , 2015, T165, 014010.	2.5	5
166	Conductance fluctuations in high mobility monolayer graphene: Nonergodicity, lack of determinism and chaotic behavior. <i>Scientific Reports</i> , 2016, 6, 33118.	3.3	5
167	Monte Carlo study of minority electronic transport in InGaAs: Effects of phonon mode splitting and dynamically screened electron-hole interactions. <i>Journal of Applied Physics</i> , 1990, 68, 4322-4324.	2.5	4
168	Quantum Transport Simulation of the DOS function, Self-Consistent Fields and Mobility in MOS Inversion Layers. <i>VLSI Design</i> , 1998, 6, 21-25.	0.5	4
169	Simultaneous observation of electron and hole velocity overshoots in an Al <sub>0.3</sub> Ga <sub>0.7</sub> As-based $\delta$ -n semiconductor nanostructure. <i>Applied Physics Letters</i> , 2002, 81, 3999-4001.	3.3	4
170	Dreams Versus Reality: Plenary Debate Session on Quantum Computing. <i>Quantum Information Processing</i> , 2003, 2, 449-472.	2.2	4
171	Transport in quantum dots. <i>Materials Today</i> , 2003, 6, 32-37.	14.2	4
172	Dual computational basis qubit in semiconductor heterostructures. <i>Applied Physics Letters</i> , 2003, 83, 1453-1455.	3.3	4
173	Generalized interfaces. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 1891.	1.6	4
174	Kinetic lattice Monte Carlo simulations of germanium epitaxial growth on the silicon (100) surface incorporating Si-Ge exchange. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005, 23, 1821.	1.6	4
175	MAGNETO-TRANSPORT IN OPEN QUANTUM DOT ARRAYS AT THE TRANSITION FROM LOW TO HIGH MAGNETIC FIELDS: REGULARITY AND CHAOS. <i>International Journal of Modern Physics B</i> , 2007, 21, 1288-1296.	2.0	4
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