Jonathan Bird

List of Publications by Year
in descending order

307 papers	5,204 citations	109321 35 h-index	144013 57 g-index
310 all docs	310 docs citations	310 times ranked	3798 citing authors

#	Article	IF	Citations
1	Recent experimental studies of electron dephasing in metal and semiconductor mesoscopic structures. Journal of Physics Condensed Matter, 2002, 14, R501-R596.	1.8	310
2	A review of progress in the physics of open quantum systems: theory and experiment. Reports on Progress in Physics, 2015, 78, 114001.	20.1	185
3	Lead-Orientation-Dependent Wave Function Scarring in Open Quantum Dots. Physical Review Letters, 1999, 82, 4691-4694.	7.8	131
4	Wave Function Scarring Effects in Open Stadium Shaped Quantum Dots. Physical Review Letters, 1997, 79, 123-126.	7.8	127
5	Magnetotransport fluctuations in regular semiconductor ballistic quantum dots. Physical Review B, 1996, 54, 17705-17715.	3.2	125
6	Conduction Mechanisms in CVD-Grown Monolayer MoS₂ Transistors: From Variable-Range Hopping to Velocity Saturation. Nano Letters, 2015, 15, 5052-5058.	9.1	92
7	Classical and quantum transport in focused-ion-beam-deposited Pt nanointerconnects. Applied Physics Letters, 2003, 82, 802-804.	3.3	87
8	Nonlinear current-voltage characteristics of Pt nanowires and nanowire transistors fabricated by electron-beam deposition. Applied Physics Letters, 2003, 83, 4426-4428.	3.3	82
9	Electrical properties of field-effect transistors based on C60 nanowhiskers. Applied Physics Letters, 2006, 88, 112109.	3.3	80
10	Fano resonances in open quantum dots and their application as spin filters. Applied Physics Letters, 2003, 82, 4561-4563.	3.3	79
11	Saturation of Phase Breaking in an Open Ballistic Quantum Dot. Physical Review Letters, 1999, 82, 4687-4690.	7.8	76
12	Einselection in Action: Decoherence and Pointer States in Open Quantum Dots. Physical Review Letters, 2004, 93, 026803.	7.8	74
13	Phase breaking in ballistic quantum dots: Transition from two- to zero-dimensional behavior. Physical Review B, 1995, 51, 18037-18040.	3.2	73
14	Tunneling and Nonhyperbolicity in Quantum Dots. Physical Review Letters, 2002, 88, 236804.	7.8	72
15	Application of split-gate structures as tunable spin filters. Applied Physics Letters, 2000, 77, 1050.	3.3	71
16	Periodic conductance fluctuations and stable orbits in mesoscopic semiconductor billiards. Europhysics Letters, 1996, 35, 529-534.	2.0	65
17	Wave function scarring in open quantum dots:â€ƒA microwave-billiard analog study. Physical Review B, 2002, 65, .	3.2	59
18	Interference and interactions in open quantum dots. Reports on Progress in Physics, 2003, 66, 583-632.	20.1	58

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19	Evolution of Fractal Patterns during a Classical-Quantum Transition. Physical Review Letters, 2001, 87, 036802.	7.8	57
20	Gate-Controlled Metalâ€“Insulator Transition in TiS₃ Nanowire Field-Effect Transistors. ACS Nano, 2019, 13, 803-811.	14.6	54
21	The persistence of eigenstates in open quantum dots. Applied Physics Letters, 2002, 81, 129-131.	3.3	53
22	Probing the Microscopic Structure of Bound States in Quantum Point Contacts. Physical Review Letters, 2007, 99, 136805.	7.8	53
23	Nonlocal resonant interaction between coupled quantum wires. Applied Physics Letters, 2003, 82, 3952-3954.	3.3	50
24	Quantum-effect and single-electron devices. IEEE Nanotechnology Magazine, 2003, 2, 368-385.	2.0	49
25	Large g-factor enhancement in high-mobility InAs/AlSb quantum wells. Applied Physics Letters, 2002, 81, 1833-1835.	3.3	47
26	Thermally Assisted Nonvolatile Memory in Monolayer MoS₂ Transistors. Nano Letters, 2016, 16, 6445-6451.	9.1	47
27	Open quantum dotsâ€”probing the quantum to classical transition. Semiconductor Science and Technology, 2011, 26, 043001.	2.0	44
28	PHYSICS: Electron Spin Polarization in Nanoscale Constrictions. Science, 2004, 303, 1621-1622.	12.6	43
29	Lead-induced transition to chaos in ballistic mesoscopic billiards. Physical Review B, 1995, 52, R14336-R14339.	3.2	42
30	â€œFreeingâ€•Graphene from Its Substrate: Observing Intrinsic Velocity Saturation with Rapid Electrical Pulsing. Nano Letters, 2016, 16, 399-403.	9.1	40
31	Towards a Strong Spinâ€“Orbit Coupling Magnetoelectric Transistor. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2018, 4, 1-9.	1.5	40
32	Space-charge limited conduction in epitaxial chromia films grown on elemental and oxide-based metallic substrates. AIP Advances, 2019, 9, .	1.3	40
33	Signatures of quantum transport in self-assembled epitaxialnickel silicide nanowires. Applied Physics Letters, 2004, 85, 281-283.	3.3	39
34	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
35	One-dimensional resistive states in quasi-two-dimensional superconductors: Experiment and theory. Physical Review B, 2007, 76, .	3.2	38
36	Spectral characteristics of conductance fluctuations in ballistic quantum dots. Physical Review B, 1994, 50, 18678-18681.	3.2	36

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37	Large effects due to electronâ€“phonon-impurity interference in the resistivity of Pt/C-Ga composite nanowires. Applied Physics Letters, 2004, 84, 3828-3830.	3.3	33
38	The effects of inelastic scattering in open quantum dots: reduction of conductance fluctuations and disruption of wave-function `scarring'. Journal of Physics Condensed Matter, 1996, 8, L667-L674.	1.8	32
39	Detection of Local-Moment Formation Using the Resonant Interaction between Coupled Quantum Wires. Physical Review Letters, 2004, 92, 096802.	7.8	32
40	Coulomb blockade of the Aharonov-Bohm effect in GaAs/AlxGa1â^'xAs quantum dots. Physical Review B, 1994, 50, 14983-14990.	3.2	30
41	Spectral characteristics of conductance fluctuations in ballistic quantum dots: The influence of finite magnetic field and temperature. Physical Review B, 1995, 52, 8295-8304.	3.2	30
42	Experimental studies of the electronâ€“phonon interaction in InGaAs quantum wires. Applied Physics Letters, 2002, 81, 727-729.	3.3	30
43	Quantum-interference characteristics of a 25 nm trench-type InGaAs/InAlAs quantum-wire field-effect transistor. Applied Physics Letters, 2002, 80, 434-436.	3.3	30
44	Geometry-induced fractal behaviour in a semiconductor billiard. Journal of Physics Condensed Matter, 1998, 10, 1339-1347.	1.8	29
45	Fast Energy Relaxation of Hot Carriers Near the Dirac Point of Graphene. Nano Letters, 2013, 13, 4305-4310.	9.1	29
46	Giant Backscattering Magnetoresistance Resonance and Quantum Dot Electronic Structure. Physical Review Letters, 1996, 76, 2145-2148.	7.8	28
47	Conductance fluctuations and non-diffusive motion in GaAs/AlGaAs heterojunction wires. Journal of Physics Condensed Matter, 1990, 2, 7847-7852.	1.8	27
48	Weak localization in ballistic quantum dots. Physical Review B, 1999, 60, 2680-2690.	3.2	27
49	Terahertz response of quantum point contacts. Applied Physics Letters, 2008, 92, 223115.	3.3	27
50	Nonergodicity and microscopic symmetry breaking of the conductance fluctuations in disordered mesoscopic graphene. Physical Review B, 2012, 86, .	3.2	27
51	Recent experimental studies of electron transport in open quantum dots. Journal of Physics Condensed Matter, 1999, 11, R413-R437.	1.8	26
52	Large capacitance in the nanosecond-scale transient response of quantum point contacts. Applied Physics Letters, 2006, 89, 083103.	3.3	26
53	The 0.7 feature and interactions in one-dimensional systems. Journal of Physics Condensed Matter, 2008, 20, 160301.	1.8	26
54	Nanoscale-Barrier Formation Induced by Low-Dose Electron-Beam Exposure in Ultrathin MoS₂ Transistors. ACS Nano, 2016, 10, 9730-9737.	14.6	26

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55	Coupling-driven transition from multiple to single-dot interference in open quantum-dot arrays. Physical Review B, 2001, 64, .	3.2	25
56	Covalent 2D Cr₂Te₃ ferromagnet. Materials Research Letters, 2021, 9, 205-212.	8.7	25
57	Scanning Fourier spectroscopy: A microwave analog study to image transmission paths in quantum dots. Physical Review B, 2003, 68, .	3.2	24
58	The low-temperature analysis of narrow GaAs/AlGaAs heterojunction wires. Journal of Physics Condensed Matter, 1991, 3, 2897-2906.	1.8	23
59	Linear conductance of quantum point contacts with deliberately broken symmetry. Journal of Physics Condensed Matter, 2006, 18, 1715-1724.	1.8	23
60	Regular conductance fluctuations indicative of quasi-ballistic transport in bilayer graphene. Journal of Physics Condensed Matter, 2009, 21, 382202.	1.8	22
61	Collective states and charge density waves in the group IV transition metal trichalcogenides. Applied Physics Letters, 2021, 118, .	3.3	22
62	Einselection and the quantum to classical transition in quantum dots. Journal of Physics Condensed Matter, 2005, 17, S1017-S1036.	1.8	21
63	Coupling Quantum States through a Continuum: A Mesoscopic Multistate Fano Resonance. Physical Review X, 2012, 2, .	8.9	21
64	Backscattering of ballistic electrons in a corrugated-gate quantum wire. Physical Review B, 1997, 56, 1073-1076.	3.2	20
65	Terahertz transmission characteristics of high-mobility GaAs and InAs two-dimensional-electron-gas systems. Applied Physics Letters, 2006, 89, 132109.	3.3	20
66	Breakdown of correlated diffusion in quasiballistic quantum wires at high magnetic fields. Physical Review B, 1995, 52, 1793-1799.	3.2	19
67	Magnetoprobing of the discrete level spectrum of open quantum dots. Physical Review B, 1999, 60, 13676-13681.	3.2	19
68	Magnetically induced Bragg scattering of electrons in quantum-dot crystals. Physical Review B, 2004, 70, .	3.2	19
69	Manipulating the transmission of a two-dimensional electron gas via spatially varying magnetic fields. Applied Physics Letters, 2005, 86, 062106.	3.3	19
70	Switching characteristics of coupled quantum wires with tunable coupling strength. Applied Physics Letters, 2006, 89, 013118.	3.3	19
71	Detector backaction on the self-consistent bound state in quantum point contacts. Physical Review B, 2009, 79, .	3.2	19
72	Bolometric terahertz detection in pinched-off quantum point contacts. Applied Physics Letters, 2010, 97, .	3.3	19

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73	Moving towards the magnetoelectric graphene transistor. Applied Physics Letters, 2017, 111, 182402.	3.3	19
74	Periodic conductance fluctuations and lead-induced scarring in open quantum dots. Journal of Physics Condensed Matter, 1997, 9, 5935-5950.	1.8	18
75	Localization effect in mesoscopic quantum dots and quantum-dot arrays. Physical Review B, 1999, 60, R16299-R16302.	3.2	18
76	Evidence for a reentrant metal-insulator transition in quantum-dot arrays. Physical Review B, 1999, 60, 16050-16057.	3.2	18
77	Robust mesoscopic fluctuations in disordered graphene. Applied Physics Letters, 2012, 101, 093110.	3.3	18
78	Negative Differential Conductance & Hot-Carrier Avalanching in Monolayer WS2 FETs. Scientific Reports, 2017, 7, 11256.	3.3	18
79	Magnetic-field-controlled electron dynamics in quantum cavities. Physical Review B, 2000, 62, 10255-10259.	3.2	17
80	Compact-device model development for the energy-delay analysis of magneto-electric magnetic tunnel junction structures. Semiconductor Science and Technology, 2016, 31, 065022.	2.0	17
81	Evolving magneto-electric device technologies. Semiconductor Science and Technology, 2020, 35, 073001.	2.0	17
82	Signatures of the discrete level spectrum in temperature-dependent transport through open quantum-dot arrays. Physical Review B, 2001, 64, .	3.2	16
83	Influence of interdot coupling on electron-wave interference in an open quantum-dot molecule. Applied Physics Letters, 2002, 80, 2970-2972.	3.3	16
84	Cyclotron Resonance in Doped and Undoped InAsâˆ•AlSb Heterostructures with Quantum Wells. Semiconductors, 2005, 39, 62.	0.5	16
85	Large tunneling magnetoresistance in a field-effect transistor with a nanoscale ferromagnetic gate. Applied Physics Letters, 2008, 92, 253101.	3.3	16
86	Epitaxial growth of cobalt oxide phases on Ru(0001) for spintronic device applications. Semiconductor Science and Technology, 2017, 32, 095011.	2.0	16
87	Evidence for a thermally driven charge-density-wave transition in 1T-TaS2 thin-film devices: Prospects for GHz switching speed. Applied Physics Letters, 2021, 118, .	3.3	16
88	Magnetically induced suppression of phase breaking in ballistic mesoscopic billiards. Physical Review B, 1997, 55, 1368-1371.	3.2	15
89	Quantum Transport in Single and Multiple Quantum Dots. Japanese Journal of Applied Physics, 1997, 36, 3944-3950.	1.5	15
90	Environmental coupling and phase breaking in open quantum dots. Journal of Physics Condensed Matter, 1998, 10, L55-L61.	1.8	15

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91	Phase breaking and energy relaxation in open quantum-dot arrays. Physical Review B, 2000, 62, 15356-15358.	3.2	15
92	Confinement-induced enhancement of electron-electron interactions in open quantum-dot arrays. Physical Review B, 2001, 63, .	3.2	15
93	Tuning the Fano Resonance with an Intruder Continuum. Nano Letters, 2014, 14, 788-793.	9.1	15
94	Magneto-electric magnetic tunnel junction logic devices. , 2015, , .		15
95	Electric-field dependent conduction mechanisms in crystalline chromia. Applied Physics Letters, 2015, 106, .	3.3	15
96	On the Influence of Resonant States on Ballistic Transport in Open Quantum Dots: Spectroscopy and Tunneling in the Presence of Multiple Conducting Channels. , 2003, , 209-276.		15
97	Dielectric properties of thin Cr2O3 films grown on elemental and oxide metallic substrates. Physical Review Materials, 2018, 2, .	2.4	15
98	Transient hot-carrier dynamics and intrinsic velocity saturation in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2020, 4, .	2.4	15
99	Readout of single spins via Fano resonances in quantum point contacts. Applied Physics Letters, 2005, 87, 192501.	3.3	14
100	Large hysteretic magnetoresistance in high-mobility semiconductor quantum wires bridged by single-domain nanomagnets. Applied Physics Letters, 2007, 91, 022105.	3.3	14
101	C₆₀ Nanowhisker Field-Effect-Transistor Application for Nano-Electronics. Japanese Journal of Applied Physics, 2008, 47, 501.	1.5	14
102	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
103	Resonantly Enhanced Nonlinear Conductance in Long Quantum Point Contacts near Pinch-Off. Physical Review Letters, 2006, 97, 096801.	7.8	13
104	Nonlocal bias spectroscopy of the self-consistent bound state in quantum point contacts near pinch off. Applied Physics Letters, 2009, 94, 213103.	3.3	13
105	Magneto-electric magnetic tunnel junction as process adder for non-volatile memory applications. , 2015, , .		13
106	Scaling properties of universal conductance fluctuations in quasiballistic split-gate wires: Probing geometrical effects. Physical Review B, 1993, 48, 12353-12356.	3.2	12
107	Precise period doubling of the Aharonov-Bohm effect in a quantum dot at high magnetic fields. Physical Review B, 1996, 53, 3642-3645.	3.2	12
108	Exact and statistical self-similarity in magnetoconductance fluctuations:â€ƒA unified picture. Physical Review B, 1998, 58, 11107-11110.	3.2	12

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109	Probing the Discrete Level Spectrum of Open Quantum Dots. Japanese Journal of Applied Physics, 1999, 38, 322-324.	1.5	12
110	Low-temperature decoherence in disordered Pt nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 112-116.	2.7	12
111	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
112	Large negative persistent photoconductivity in InAsâˆ•AlSb quantum wells. Applied Physics Letters, 2005, 86, 192109.	3.3	12
113	Probing charge trapping and joule heating in graphene field-effect transistors by transient pulsing. Semiconductor Science and Technology, 2017, 32, 084005.	2.0	12
114	Transient Response of h-BN-Encapsulated Graphene Transistors: Signatures of Self-Heating and Hot-Carrier Trapping. ACS Omega, 2019, 4, 4082-4090.	3.5	12
115	Akis, Ferry, and Bird Reply:. Physical Review Letters, 1998, 81, 1745-1745.	7.8	11
116	Quasi-one-dimensional transport characteristics of ridge-type InGaAs quantum-wire field-effect transistors. Applied Physics Letters, 2001, 79, 371-373.	3.3	11
117	Open quantum dots: II. Probing the classical to quantum transition. Journal of Physics Condensed Matter, 2012, 24, 343202.	1.8	11
118	Investigation of laser-induced-metal phase of MoTe₂ and its contact property via scanning gate microscopy. Nanotechnology, 2020, 31, 205205.	2.6	11
119	Magneto-Coulomb oscillations. Physical Review B, 1994, 49, 11488-11491.	3.2	10
120	Giant back-scattering resonances in edge-state transport through quantum dots. Physical Review B, 1997, 56, 7477-7484.	3.2	10
121	Carrier Transport in Nanodevices. Japanese Journal of Applied Physics, 1997, 36, 1841-1845.	1.5	10
122	Quantum dots: applications in technology and in quantum physics. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 25, 298-302.	2.7	10
123	Quantum asymmetry of switching in laterally coupled quantum wires with tunable coupling strength. Applied Physics Letters, 2006, 89, 153128.	3.3	10
124	Using split-gate structures to explore the implementation of a coupled-electron-waveguide qubit scheme. Journal of Physics Condensed Matter, 2007, 19, 276205.	1.8	10
125	Pulsed measurements of the nonlinear conductance of quantum point contacts. Applied Physics Letters, 2007, 90, 043103.	3.3	10
126	Linear and nonlinear conductance of ballistic quantum wires with hybrid confinement. Journal of Applied Physics, 2008, 103, 013701.	2.5	10

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127	Electron Transport Properties in Photo and Supersonic Wave Irradiated C60Fullerene Nano-Whisker Field-Effect Transistors. Japanese Journal of Applied Physics, 2010, 49, 04DN12.	1.5	10
128	Evaluating the performance of quantum point contacts as nanoscale terahertz sensors. Optics Express, 2010, 18, 4609.	3.4	10
129	Wave Function Scarring in Open Ballistic Quantum Dots. Japanese Journal of Applied Physics, 1997, 36, 3981-3985.	1.5	9
130	Non-Equilibrium Electrons in a Ballistic Quantum Dot. Physica Status Solidi (B): Basic Research, 1997, 204, 318-321.	1.5	9
131	Size-dependent effects on the magnetotransport fluctuations of square quantum dots. Semiconductor Science and Technology, 1998, 13, A21-A23.	2.0	9
132	Theoretical Considerations of Electron Transport in Single and Multiple Quantum Dots. Japanese Journal of Applied Physics, 1999, 38, 303-307.	1.5	9
133	Signatures of dynamical tunneling in semiclassical quantum dots. Physical Review E, 2003, 68, 026221.	2.1	9
134	Scanning gate microscopy of copper phthalocyanine field effect transistors. Applied Physics Letters, 2007, 91, .	3.3	9
135	Large hysteretic magnetoresistance of silicide nanostructures. Physical Review B, 2007, 76, .	3.2	9
136	Manipulation of an unusual anomalous Hall effect in Ga1âˆ’xMnxSb random alloys. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2104-2106.	2.7	9
137	Electrical signatures of ferromagnetism in epitaxial FeSi2 nanowires. Applied Physics Letters, 2010, 97, 263111.	3.3	9
138	Experimental evidence for direct insulator-quantum Hall transition in multi-layer graphene. Nanoscale Research Letters, 2013, 8, 214.	5.7	9
139	Large Magnetoresistance of Nickel-Silicide Nanowires: Non-Equilibrium Heating of Magnetically-Coupled Dangling Bonds. Nano Letters, 2013, 13, 1106-1110.	9.1	9
140	VerilogA based compact model of a three-terminal ME-MTJ device. , 2016, , .		9
141	Compact Modeling and Design of Magneto-Electric Transistor Devices and Circuits. , 2018, , .		9
142	High-electric-field behavior of the metal-insulator transition in TiS₃ nanowire transistors. Applied Physics Letters, 2022, 120, 073102.	3.3	9
143	Magneto-transport in corrugated quantum wires. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 750-755.	2.7	8
144	50-Î©-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

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145	Signatures of bandlike tunneling in granular nanowires. Physical Review B, 2005, 72, .	3.2	8
146	Investigating dynamical tunnelling in open quantum dots by means of a soft-walled microwave-cavity analogue. Journal of Physics Condensed Matter, 2005, 17, L191-L198.	1.8	8
147	Influence of Realistic Potential Profile of Coupled Electron Waveguide on Electron Switching Characteristics. IEEE Nanotechnology Magazine, 2006, 5, 712-715.	2.0	8
148	Open quantum dots: Physics of the nonâ€Hermitian Hamiltonian. Fortschritte Der Physik, 2013, 61, 291-304.	4.4	8
149	Evaluating the Sources of Grapheneâ€™s Resistivity Using Differential Conductance. Scientific Reports, 2017, 7, 10317.	3.3	8
150	Empirical Correlation Between T c and the Temperature Dependence of the Electronic Specific Heat of Superconducting La 2- x Sr x CuO 4 at Low Temperatures. Europhysics Letters, 1995, 29, 383-388.	2.0	7
151	Spin-polarized transport through a quantum point contact in strongly quantizing magnetic fields: mimicking the 0.7 scenario. Journal of Physics Condensed Matter, 2006, 18, 3277-3284.	1.8	7
152	Classical and quantum mechanical transport simulations in open quantum dots. Journal of Computational Electronics, 2007, 6, 93-96.	2.5	7
153	Nonlinear characteristics of the hysteretic magnetoresistance of a hybrid nanomagnetic field-effect transistor. Applied Physics Letters, 2008, 93, .	3.3	7
154	Field-effect-transistor characteristics of solvate C₆₀fullerene nanowhiskers. Journal of Physics: Conference Series, 2009, 159, 012004.	0.4	7
155	Nonvolatile Memory Action Due to Hot-Carrier Charge Injection in Graphene-on-Parylene Transistors. ACS Applied Electronic Materials, 2019, 1, 2260-2267.	4.3	7
156	Conductance Fluctuations in GaAs/AlGaAs Narrow Wires in Quasi-Ballistic Regime. Japanese Journal of Applied Physics, 1992, 31, 4504-4507.	1.5	6
157	The Transmission Properties of Quantum Dots at High Magnetic Fields. Japanese Journal of Applied Physics, 1993, 32, 6246-6250.	1.5	6
158	Correlation Field Analysis of the Influence of Device Geometry and Bulk Disorder on Electron Interference in Quantum Wires. Japanese Journal of Applied Physics, 1995, 34, 1339-1341.	1.5	6
159	Phase breaking of nonequilibrium electrons in a ballistic quantum dot. Physical Review B, 1997, 56, 14937-14940.	3.2	6
160	Zero field magnetoresistance peaks in open quantum dots: weak localization or a fundamental property?. Journal of Physics Condensed Matter, 1999, 11, 4657-4664.	1.8	6
161	Interaction corrections to transport due to quasibound states in open quantum dots. Applied Physics Letters, 2002, 81, 3861-3863.	3.3	6
162	A model for many-body interaction effects in open quantum dot systems. Journal of Physics Condensed Matter, 2003, 15, 147-158.	1.8	6

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163	Coupled quantum wires as a detector of many-body states below the last conductance plateau. Semiconductor Science and Technology, 2004, 19, S405-S408.	2.0	6
164	Influence of magnetic moment formation on the conductance of coupled quantum wires. Journal of Physics Condensed Matter, 2005, 17, 5269-5284.	1.8	6
165	Current-voltage spectroscopy of the subband structure of strongly pinched-off quantum point contacts. Applied Physics Letters, 2009, 95, .	3.3	6
166	Formation of a protected sub-band for conduction in quantum point contacts under extreme biasing. Nature Nanotechnology, 2014, 9, 101-105.	31.5	6
167	Conductance fluctuations in graphene in the presence of long-range disorder. Journal of Physics Condensed Matter, 2016, 28, 135302.	1.8	6
168	Valley polarized conductance quantization in bilayer graphene narrow quantum point contact. Applied Physics Letters, 2021, 118, .	3.3	6
169	Study of Scattering Processes in Quantum Wires by a Correlation Field Analysis of the Phase Coherent Interferences. Japanese Journal of Applied Physics, 1995, 34, 4345-4347.	1.5	5
170	Signatures of coherent electron transport in open quantum dot arrays. Nanotechnology, 2000, 11, 365-369.	2.6	5
171	Insulator, semiclassical oscillations and quantum Hall liquids at low magnetic fields. Journal of Physics Condensed Matter, 2012, 24, 405601.	1.8	5
172	The magnetic Y-branch nanojunction: Domain-wall structure and magneto-resistance. Applied Physics Letters, 2012, 101, 102403.	3.3	5
173	Reversing hot-carrier energy-relaxation in graphene with a magnetic field. Applied Physics Letters, 2014, 104, 193115.	3.3	5
174	On the zero-bias anomaly and Kondo physics in quantum point contacts near pinch-off. Journal of Physics Condensed Matter, 2014, 26, 125304.	1.8	5
175	Detecting weak coupling in mesoscopic systems with a nonequilibrium Fano resonance. Physical Review B, 2016, 93, .	3.2	5
176	Graphene on Chromia: A System for Beyondâ€Roomâ€Temperature Spintronics. Advanced Materials, 2022, 34, e2105023.	21.0	5
177	Observation of Aharonov-Bohm Oscillations in the Magnetoresistance of a GaAs/AlGaAs Quantum Dot. Japanese Journal of Applied Physics, 1994, 33, 2509-2510.	1.5	4
178	Intrinsic stable orbits in open quantum dots. Semiconductor Science and Technology, 1998, 13, A4-A6.	2.0	4
179	Experimental Signatures of Wavefunction Scarring in Open Semiconductor Billiards. Physica Scripta, 2001, T90, 50.	2.5	4
180	Can Kondo-like behavior occur in open quantum dots?. Microelectronic Engineering, 2002, 63, 277-286.	2.4	4

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181	Transport in quantum dots. Materials Today, 2003, 6, 32-37.	14.2	4
182	Generalized interfaces. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1891.	1.6	4
183	A nanowire magnetic memory cell based on a periodic magnetic superlattice. Journal of Physics Condensed Matter, 2005, 17, 5263-5268.	1.8	4
184	Evidence of double layer quantum dot formation in a silicon-on-insulator nanowire transistor. Applied Physics Letters, 2005, 86, 043101.	3.3	4
185	MAGNETO-TRANSPORT IN OPEN QUANTUM DOT ARRAYS AT THE TRANSITION FROM LOW TO HIGH MAGNETIC FIELDS: REGULARITY AND CHAOS. International Journal of Modern Physics B, 2007, 21, 1288-1296.	2.0	4
186	Classical and quantum dynamics in an array of electron billiards. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1315-1318.	2.7	4
187	Dynamical characteristics of the giant magneto-resistance of epitaxial silicide nanowires. Nanotechnology, 2009, 20, 135401.	2.6	4
188	Towards Graphene GHz/THz Nanosensor. Japanese Journal of Applied Physics, 2011, 50, 070119.	1.5	4
189	Charge carrier behavior in UV irradiated fullerene nano whiskers based on studies of electrical conduction and ESR. AIP Conference Proceedings, 2011, , .	0.4	4
190	Tunable insulator-quantum Hall transition in a weakly interacting two-dimensional electron system. Nanoscale Research Letters, 2013, 8, 307.	5.7	4
191	Electroluminescence from GaAs/AlGaAs Heterostructures in Strong in-Plane Electric Fields: Evidence fork- and Real-Space Charge Transfer. ACS Photonics, 2015, 2, 1155-1159.	6.6	4
192	Multi-bit adder design using ME-MTJ technology. , 2016, , .		4
193	Verilog-A based compact modeling of the magneto-electric FET device. , 2017, , .		4
194	Analysis of Operation Mechanism of Field Effect Transistor Composed of Network of High-Quality Single Wall Carbon Nanotubes by Scanning Gate Microscopy. Japanese Journal of Applied Physics, 2012, 51, 04DN05.	1.5	4
195	Asymmetrically Engineered Nanoscale Transistors for On-Demand Sourcing of Terahertz Plasmons. Nano Letters, 2022, 22, 2674-2681.	9.1	4
196	Electron Wave Interference in Ballistic and Quasi-Ballistic Nanostructures. Japanese Journal of Applied Physics, 1995, 34, 6966.	1.5	3
197	The use of wide ballistic cavities to investigate local weak localization processes induced by geometric scattering. Semiconductor Science and Technology, 1996, 11, 1189-1197.	2.0	3
198	Trajectory Transition Due to Gate Depletion in Corrugation Gated Quantum Wires. Japanese Journal of Applied Physics, 1997, 36, 1746-1748.	1.5	3

#	Article	IF	Citations
199	Phase Breaking of Coherent Electron Waves in Dot Array Systems. Japanese Journal of Applied Physics, 1997, 36, 3971-3973.	1.5	3
200	Low-temperature magnetotransport in ballistic quantum dots and wires. Semiconductor Science and Technology, 1998, 13, A15-A17.	2.0	3
201	Scale factor mapping of statistical and exact self-similarity in billiards. Semiconductor Science and Technology, 1998, 13, A41-A43.	2.0	3
202	Modeling of Electron Transport in Corrugated Quantum Wires. Japanese Journal of Applied Physics, 1999, 38, 325-327.	1.5	3
203	Zero Field Magnetoresistance Peaks in Open Quantum Dots: Weak Localization or a Fundamental Property?. Japanese Journal of Applied Physics, 1999, 38, 328-331.	1.5	3
204	Hot carrier scaling of localization in a quantum dot array. Physica B: Condensed Matter, 1999, 272, 49-52.	2.7	3
205	Transport study of ultra-thin SOI MOSFETs. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 39-43.	2.7	3
206	Transport in open quantum systems: comparing classical and quantum phase space dynamics. Journal of Computational Electronics, 2008, 7, 259-262.	2.5	3
207	Characterization of Nanomagnet Fringing Fields in Hybrid Semiconductor/Ferromagnetic Devices. IEEE Transactions on Magnetics, 2008, 44, 4706-4710.	2.1	3
208	Detecting bound spins using coupled quantum point contacts. Journal of Physics Condensed Matter, 2008, 20, 164216.	1.8	3
209	Aharonov-Bohm effect in the magnetoresistance of a multiwalled carbon nanotube with tunneling contacts. Physical Review B, 2008, 77, .	3.2	3
210	Crossover from Fermi Liquid to Multichannel Luttinger Liquid in High-Mobility Quantum Wires. Physical Review Letters, 2010, 104, 046805.	7.8	3
211	Talking through the continuum: New manifestations of Fanoâ€resonance phenomenology realized with mesoscopic nanostructures. Fortschritte Der Physik, 2013, 61, 348-359.	4.4	3
212	GR-FET application for high-frequency detection device. Nanoscale Research Letters, 2013, 8, 22.	5.7	3
213	Plasmon-mediated energy relaxation in graphene. Applied Physics Letters, 2015, 107, 262103.	3.3	3
214	Building the Quasi One Dimensional Transistor from 2D Materials. , 2019, , .		3
215	Reply to â€œComment on â€˜Gate-Controlled Metalâ€“Insulator Transition in TiS₃ Nanowire Field-Effect Transistorsâ€™â€• ACS Nano, 2019, 13, 8498-8500.	14.6	3
216	Signature of Spin-Resolved Quantum Point Contact in p-Type Trilayer WSe₂ van der Waals Heterostructure. Nano Letters, 2021, 21, 7534-7541.	9.1	3

#	Article	IF	Citations
217	Electron Wave Interference in Ballistic and Quasi-Ballistic Nanostructures. Japanese Journal of Applied Physics, 1995, 34, 6966-6970.	1.5	3
218	Towards Graphene GHz/THz Nanosensor. Japanese Journal of Applied Physics, 2011, 50, 070119.	1.5	3
219	Pulsed studies of intervalley transfer in Al0.35In0.65As : A paradigm for valley photovoltaics. Physical Review Materials, 2020, 4, .	2.4	3
220	Probing the Dynamics of Electric Double Layer Formation over Wide Time Scales (10â€“9â€“10+5 s) in the Ionic Liquid DEME-TFSI. Journal of Physical Chemistry C, 2022, 126, 1958-1965.	3.1	3
221	Zero-Current Voltage Fluctuations in Quantum Dots at High Magnetic Fields. Journal of the Physical Society of Japan, 1995, 64, 3618-3621.	1.6	2
222	The effect of mode coupling on conductance fluctuations in ballistic quantum dots. Semiconductor Science and Technology, 1998, 13, A11-A14.	2.0	2
223	Metalâ€“insulator transition in quantum dot arrays. Superlattices and Microstructures, 2000, 27, 311-314.	3.1	2
224	Phase-breaking time variations with temperature and current in an open quantum dot array. Superlattices and Microstructures, 2000, 27, 315-318.	3.1	2
225	Current effects on high magnetic field resonances in a dot array. Superlattices and Microstructures, 2000, 27, 327-330.	3.1	2
226	Insulating state in open quantum dots and quantum dot arrays. Annalen Der Physik, 2000, 9, 65-68.	2.4	2
227	Self-similar conductance fluctuations in low temperature magneto-transport of coupled dot systems. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 18, 147-148.	2.7	2
228	Tunneling spectroscopy of a ballistic quantum wire. Physical Review B, 2008, 78, .	3.2	2
229	Influence of quantum-interference on the fringing-field magnetoresistance of hybrid ferromagnetic/semiconductor devices. Applied Physics Letters, 2009, 95, 143113.	3.3	2
230	Nonspin related giant magnetoresistance â‰ˆ600% in hybrid field-effect transistors with ferromagnetic gates. Applied Physics Letters, 2010, 97, 063108.	3.3	2
231	Many-body enhanced nonlinear conductance resonance in quantum channels. Physical Review B, 2011, 84, .	3.2	2
232	High-Voltage Breakdown and the Gunn Effect in GaAs/AlGaAs Nanoconstrictions. IEEE Nanotechnology Magazine, 2015, 14, 524-530.	2.0	2
233	The Magnetic Field Dependent Characteristics of Conductance Fluctuations in Ballistic Quantum Dots. Japanese Journal of Applied Physics, 1995, 34, 4342-4344.	1.5	1
234	Carrier scattering processes in quantum wires at high magnetic fields by a correlation field analysis. Physica B: Condensed Matter, 1996, 216, 376-379.	2.7	1

#	Article	IF	Citations
235	Illumination-induced inhomogeneity in the carrier density profile of split gate devices. Semiconductor Science and Technology, 1996, 11, 1085-1089.	2.0	1
236	Resonant peaks in quantum Hall transport in quantum dot arrays. Physica B: Condensed Matter, 2001, 298, 56-59.	2.7	1
237	Magnetic-Field-Driven Transitions of Chaotic Dynamics in Quantum Cavities. Physica Status Solidi (B): Basic Research, 2001, 224, 471-474.	1.5	1
238	Trench-type InGaAs quantum-wire field effect transistor with negative differential conductance fabricated by hydrogen-assisted molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1192.	1.6	1
239	Variation of the temperature dependence of the energy-relaxation time with magnetic field in open quantum dot arrays at low temperatures. Physica B: Condensed Matter, 2002, 314, 486-489.	2.7	1
240	Magneto-conductance in dot array system at high-magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 769-772.	2.7	1
241	Numerical simulations of magneto transport in dot array systems at high magnetic fields. Microelectronic Engineering, 2002, 63, 91-95.	2.4	1
242	Single-electron tunneling in silicon-on-insulator nano-wire transistors. Superlattices and Microstructures, 2003, 34, 245-251.	3.1	1
243	A model for interaction corrections to transport through open quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 206-209.	2.7	1
244	Magneto-conductance fluctuations in a V-grooved GaAs quantum-wire. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 102-106.	2.7	1
245	Fractal conductance fluctuations in a quantum-dot molecule. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 221-224.	2.7	1
246	Fractal behavior in magnetoconductance in coupled quantum dot systems. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 361-364.	2.7	1
247	Interaction of microwaves with backscattering orbits in open quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 514-517.	2.7	1
248	Novel Many-Body Transport Phenomenon in Coupled Quantum Wires. IEEE Nanotechnology Magazine, 2004, 3, 110-114.	2.0	1
249	Infrared light-induced beating of Shubnikovâ€“de Haas oscillations in MBE grown InAs/AlSb quantum wells. Journal of Crystal Growth, 2005, 278, 661-665.	1.5	1
250	Unusual Persistent Photoconductivity in the InAsâ•AlSb Quantum Well. Semiconductors, 2005, 39, 95.	0.5	1
251	Electron Dynamics in a Coupled Quantum-Point Contact Structure With a Local Magnetic Moment. IEEE Nanotechnology Magazine, 2005, 4, 21-26.	2.0	1
252	Phenomenological investigation of many-body induced modifications to the one-dimensional density of states of long quantum wires. Journal of Physics Condensed Matter, 2008, 20, 164209.	1.8	1

#	Article	IF	Citations
253	Transmission in nanostructures. , 0, , 116-192.		1
254	The quantum Hall effects. , 0, , 193-247.		1
255	Quantum dots. , 0, , 299-412.		1
256	Magnetoresistance and Phase Breaking Behavior of a Nitrogen Doped Multi-Walled Carbon Nanotube. Japanese Journal of Applied Physics, 2010, 49, 02BD01.	1.5	1
257	Analysis of Operation Mechanism of Field Effect Transistor Composed of Network of High-Quality Single Wall Carbon Nanotubes by Scanning Gate Microscopy. Japanese Journal of Applied Physics, 2012, 51, 04DN05.	1.5	1
258	Terahertz Detection With Nanoscale Semiconductor Rectifiers. IEEE Sensors Journal, 2013, 13, 24-30.	4.7	1
259	Magneto-electric magnetic tunnel junction based analog circuit options. , 2017, , .		1
260	Ordered three-fold symmetric graphene oxide/buckled graphene/graphene heterostructures on MgO(111) by carbon molecular beam epitaxy. Journal of Materials Chemistry C, 2018, 6, 4225-4233.	5.5	1
261	Realizing Asymmetric Boundary Conditions for Plasmonic THz Wave Generation in HEMTs. , 2019, , .		1
262	Universal scaling of weak localization in graphene due to bias-induced dispersion decoherence. Scientific Reports, 2020, 10, 5611.	3.3	1
263	Novel FET Structures Based on Bundled C60 nanowhiskers. AIP Conference Proceedings, 2007, , .	0.4	1
264	Graphene on Chromia: A System for Beyondâ€Roomâ€Temperature Spintronics (Adv. Mater. 12/2022). Advanced Materials, 2022, 34, .	21.0	1
265	Low temperature magnetoresistance in corrugation gated wires. European Physical Journal D, 1996, 46, 2347-2348.	0.4	0
266	The Role of Electron Phase Coherence in Quantum Transport through Open Ballistic Cavities. Japanese Journal of Applied Physics, 1997, 36, 3968-3970.	1.5	0
267	Phase Breaking in a Quantum Billiard. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1997, 07, 937-943.	1.7	0
268	Ballistic Weak Localization and Wave Function Scarring in Quantum Wires. Japanese Journal of Applied Physics, 1998, 37, 1657-1659.	1.5	0
269	Magneto-Conductance Oscillations in Open Quantum Dot Arrays. Physica Status Solidi (B): Basic Research, 2001, 224, 711-714.	1.5	0
270	Beating of the Shubnikov-de Haas Oscillations in GaAs/AlGaAs Quantum-Dot Arrays. Japanese Journal of Applied Physics, 2001, 40, 1990-1993.	1.5	0

#	Article	IF	Citations
271	A drastic change of the effective g-value in nanostructure system: Zeeman attenuator. Physica B: Condensed Matter, 2002, 314, 235-238.	2.7	0
272	Non-weak-localization signature in the average conductance of open quantum-dot arrays. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 630-633.	2.7	0
273	Guest editorâ€™s foreword. Superlattices and Microstructures, 2003, 34, 147.	3.1	0
274	Quantum interference on electron wave spreading over a coupled dot. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 18, 89-90.	2.7	0
275	Landau-level depopulation and high-field magneto-resistance of open quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 197-201.	2.7	0
276	Non-invasive study of transport in open quantum dot structures. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 202-205.	2.7	0
277	Chaotic Behavior in Quantum Transport Devices. AIP Conference Proceedings, 2005, , .	0.4	0
278	Magnetoresistance experiments and quasi-classical calculations regarding backscattering in open quantum dots. AIP Conference Proceedings, 2005, , .	0.4	0
279	Propagation of electron waves in InAs/AlGaSb. AIP Conference Proceedings, 2005, , .	0.4	0
280	Novel phenomena in one-dimensional non-linear transport in long quantum wires. Journal of Physics: Conference Series, 2006, 38, 83-86.	0.4	0
281	The influence of Coulomb interaction in quantum point contacts. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 557-559.	2.7	0
282	C60 nanowhiskers for electronics: Field-effect-transistor characteristics of pure and solvate C60 nanowhiskers. , 2007, , .		0
283	EDGE STATES AND TRAJECTORIES IN QUANTUM DOTS: PROBING THE QUANTUM-CLASSICAL TRANSITION. International Journal of Modern Physics B, 2007, 21, 1278-1287.	2.0	0
284	Chaotic Behavior in the Magneto-Resistance of Quantum Dot and Quantum Point Contact. Progress of Theoretical Physics Supplement, 2007, 166, 127-135.	0.1	0
285	Novel many-body state in quantum wires near pinch-off. AIP Conference Proceedings, 2007, , .	0.4	0
286	Investigations of the non-linear transient response of quantum point contacts using pulsed excitation with sub-nanosecond time resolution. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 40, 84-91.	2.7	0
287	Resonance modulation of the intersubband electron-electron interaction in an AlSb(Î´-Te)/InAs/AsSb(Î´-Te) quantum well by magnetic field. Semiconductors, 2007, 41, 327-334.	0.5	0
288	Fano resonances in the system of coupled point contacts. Journal of Computer-Aided Materials Design, 2007, 14, 97-101.	0.7	0

#	Article	IF	Citations
289	Magneto-resistance peaks and phase breaking behaviour in a thin multi-walled carbon nanotube. Journal of Physics: Conference Series, 2008, 109, 012018.	0.4	0
290	Ballistic transport in quantum wires. , 0, , 248-298.		0
291	Temperature decay of fluctuations. , 0, , 491-562.		0
292	Quantum fluctuations in the low temperature magneto-resistance of bi-layer graphene. Journal of Physics: Conference Series, 2010, 245, 012029.	0.4	0
293	High frequency transport in bi-layer graphene FET devices. , 2011, , .		0
294	Localized State in Quantum Point Contacts: Possible Qubit Implementation?. Journal of Computational and Theoretical Nanoscience, 2011, 8, 391-400.	0.4	0
295	Multi-continuum Fano resonance in coupled quantum point contacts: A manifestation of the â€œintegralâ€•Fano formula. Journal of Applied Physics, 2012, 112, 103704.	2.5	0
296	Difference of operation mechanisms in SWNTs network FETs studied via scanning gate microscopy. , 2013, , .		0
297	Room conditions THz detector using graphene FET. , 2013, , .		0
298	Metalâ€“insulator transition in the quasi-one-dimensional transport of fractional quantum hall states. Journal of Physics Condensed Matter, 2015, 27, 202201.	1.8	0
299	Memory circuits using NanoFerroic devices. , 2016, , .		0
300	Imaging local transport property within MoS<inf>2</inf> transistors by scanning gate microscopy. , 2016, , .		0
301	Energy relaxation of hot carriers in graphene via plasmon interactions. Journal of Computational Electronics, 2016, 15, 144-153.	2.5	0
302	Giant Zero Bias Anomaly due to Coherent Scattering from Frozen Phonon Disorder in Quantum Point Contacts. Physical Review Letters, 2019, 123, 056802.	7.8	0
303	Remote Mesoscopic Signatures of Induced Magnetic Texture in Graphene. Physical Review Letters, 2021, 126, 086802.	7.8	0
304	Fractal Transport Behavior in Coupled-Dot System. Journal of the Physical Society of Japan, 2003, 72, 203-204.	1.6	0
305	An extinction of the conductive electrons of fullerene nano whisker as the air exposure effects. Transactions of the Materials Research Society of Japan, 2011, 36, 349-353.	0.2	0
306	Electroluminescence from a GaAs/AlGaAs Heterostructure at High Electric Fields: Evidence for Real-& k-Space Transfer. , 2014, , .		0

#	Article	IF	Citations
307	Prospects for the application of two-dimensional materials to terahertz-band communications. , 2017, , .		0