Antti-Pekka Jauho

List of Publications by Year
in descending order

235	12,024	24978	29081
papers	citations	57 h-index	104 g-index

240	240	240	7763
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Time-dependent transport in interacting and noninteracting resonant-tunneling systems. Physical Review B, 1994, 50, 5528-5544.	1.1	1,695
2	Graphene Antidot Lattices: Designed Defects and Spin Qubits. Physical Review Letters, 2008, 100, 136804.	2.9	451
3	Inelastic transport theory from first principles: Methodology and application to nanoscale devices. Physical Review B, 2007, 75, .	1.1	378
4	Time-dependent transport through a mesoscopic structure. Physical Review B, 1993, 48, 8487-8490.	1.1	313
5	Acoustic phonon limited mobility in two-dimensional semiconductors: Deformation potential and piezoelectric scattering in monolayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>from first principles. Physical Review B, 2013, 87, .	1.1	243
6	Modified field enhancement and extinction by plasmonic nanowire dimers due to nonlocal response. Optics Express, 2012, 20, 4176.	1.7	239
7	Coulomb drag between parallel two-dimensional electron systems. Physical Review B, 1993, 47, 4420-4428.	1.1	227
8	Unusual resonances in nanoplasmonic structures due to nonlocal response. Physical Review B, 2011, 84, .	1.1	221
9	Inelastic Scattering and Local Heating in Atomic Gold Wires. Physical Review Letters, 2004, 93, 256601.	2.9	204
10	Excitonic Dynamical Franz-Keldysh Effect. Physical Review Letters, 1998, 81, 457-460.	2.9	201
11	Dynamical Franz-Keldysh Effect. Physical Review Letters, 1996, 76, 4576-4579.	2.9	198
12	Blueshift of the surface plasmon resonance in silver nanoparticles studied with EELS. Nanophotonics, 2013, 2, 131-138.	2.9	178
13	Counting Statistics of Non-Markovian Quantum Stochastic Processes. Physical Review Letters, 2008, 100, 150601.	2.9	173
14	Electron and phonon transport in silicon nanowires: Atomistic approach to thermoelectric properties. Physical Review B, 2009, 79, .	1.1	173
15	Surface-Decorated Silicon Nanowires: A Route to High-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi><mml:mi>T</mml:mi></mml:math>Thermoelectrics. Physical Review Letters, 2009, 103, 055502.	2.9	149
16	Nonlocal Response of Metallic Nanospheres Probed by Light, Electrons, and Atoms. ACS Nano, 2014, 8, 1745-1758.	7.3	145
17	Nonlinear gain suppression in semiconductor lasers due to carrier heating. IEEE Photonics Technology Letters, 1991, 3, 606-609.	1.3	144
18	Electronic properties of graphene antidot lattices. New Journal of Physics, 2009, 11, 095020.	1.2	143

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19	Optical bistability of graphene in the terahertz range. Physical Review B, 2014, 90, .	1.1	133
20	Theory of high-electric-field quantum transport for electron-resonant impurity systems. Physical Review B, 1984, 29, 1919-1938.	1.1	132
21	Thermoelectric properties of finite graphene antidot lattices. Physical Review B, 2011, 84, .	1.1	132
22	Graphene Nanobubbles as Valley Filters and Beam Splitters. Physical Review Letters, 2016, 117, 276801.	2.9	129
23	Full counting statistics of nano-electromechanical systems. Europhysics Letters, 2005, 69, 475-481.	0.7	123
24	Quantum Shuttle in Phase Space. Physical Review Letters, 2003, 90, 256801.	2.9	116
25	Counting statistics of transport through Coulomb blockade nanostructures: High-order cumulants and non-Markovian effects. Physical Review B, 2010, 82, .	1.1	116
26	Scaling Theory Put into Practice: First-Principles Modeling of Transport in Doped Silicon Nanowires. Physical Review Letters, 2007, 99, 076803.	2.9	112
27	Optical properties of graphene antidot lattices. Physical Review B, 2008, 77, .	1.1	109
28	Quantum Transport: The Link between Standard Approaches in Superlattices. Physical Review Letters, 1998, 80, 369-372.	2.9	108
29	Shot Noise of a Quantum Shuttle. Physical Review Letters, 2004, 92, 248302.	2.9	108
30	Bloch Oscillations, Zener Tunneling, and Wannier-Stark Ladders in the Time Domain. Physical Review Letters, 1995, 74, 1831-1834.	2.9	106
31	Quantum Corrections in Nanoplasmonics: Shape, Scale, and Material. Physical Review Letters, 2017, 118, 157402.	2.9	105
32	Current noise in a vibrating quantum dot array. Physical Review B, 2004, 70, .	1.1	102
33	Localized plasmons in graphene-coated nanospheres. Physical Review B, 2015, 91, .	1.1	101
34	Linear-response theory of Coulomb drag in coupled electron systems. Physical Review B, 1995, 52, 14761-14774.	1.1	100
35	Electronic transport through Si nanowires: Role of bulk and surface disorder. Physical Review B, 2006, 74, .	1.1	95
36	Thermal rectification in nonlinear quantum circuits. Physical Review B, 2009, 79, .	1.1	95

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37	Mesoscopic Photon Heat Transistor. Physical Review Letters, 2008, 100, 155902.	2.9	93
38	Clar Sextet Analysis of Triangular, Rectangular, and Honeycomb Graphene Antidot Lattices. ACS Nano, 2011, 5, 523-529.	7.3	93
39	Quantum dot as a spin-current diode: A master-equation approach. Physical Review B, 2007, 75, .	1.1	91
40	Heat Conductance Is Strongly Anisotropic for Pristine Silicon Nanowires. Nano Letters, 2008, 8, 3771-3775.	4.5	90
41	Non-Markovian Model of Photon-Assisted Dephasing by Electron-Phonon Interactions in a Coupled Quantum-Dotâ€“Cavity System. Physical Review Letters, 2010, 104, 157401.	2.9	90
42	Quantum kinetic equation for electronic transport in nondegenerate semiconductors. Physical Review B, 1987, 36, 6602-6608.	1.1	85
43	Plasmonâ€“emitter interactions at the nanoscale. Nature Communications, 2020, 11, 366.	5.8	84
44	Dephasing Times in Quantum Dots due to Elastic LO Phonon-Carrier Collisions. Physical Review Letters, 2000, 85, 1516-1519.	2.9	82
45	Lithographic band structure engineering of graphene. Nature Nanotechnology, 2019, 14, 340-346.	15.6	82
46	Optical response and excitons in gapped graphene. Physical Review B, 2009, 79, .	1.1	72
47	Spin-polarized current and shot noise in the presence of spin flip in a quantum dot via nonequilibrium Greenâ€™s functions. Physical Review B, 2008, 78, .	1.1	69
48	Dynamical polarizability of graphene irradiated by circularly polarized ac electric fields. Physical Review B, 2012, 85, .	1.1	69
49	Refractive-Index Sensing with Ultrathin Plasmonic Nanotubes. Plasmonics, 2013, 8, 193-199.	1.8	67
50	Classical and quantum plasmonics in graphene nanodisks: Role of edge states. Physical Review B, 2014, 90, .	1.1	67
51	Linear optical absorption spectra of mesoscopic structures in intense THz fields: Free-particle properties. Physical Review B, 1998, 57, 8860-8872.	1.1	66
52	Inelastic Quantum Transport in Superlattices: Success and Failure of the Boltzmann Equation. Physical Review Letters, 1999, 83, 836-839.	2.9	66
53	Kerr nonlinearity and plasmonic bistability in graphene nanoribbons. Physical Review B, 2015, 92, .	1.1	66
54	Angle dependence of Andreev scattering at semiconductorâ€“superconductor interfaces. Physical Review B, 1999, 59, 10176-10182.	1.1	63

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55	Nonlocal response in plasmonic waveguiding with extreme light confinement. Nanophotonics, 2013, 2, 161-166.	2.9	63
56	Plasmonic eigenmodes in individual and bow-tie graphene nanotriangles. Scientific Reports, 2015, 5, 9535.	1.6	62
57	Quasienergy Spectroscopy of Excitons. Physical Review Letters, 1999, 83, 1207-1210.	2.9	61
58	Pseudomagnetic fields and triaxial strain in graphene. Physical Review B, 2016, 93, .	1.1	60
59	Gauge-invariant formulation of the intracollisional field effect including collisional broadening. Physical Review B, 1991, 44, 3655-3664.	1.1	57
60	Density functional study of graphene antidot lattices: Roles of geometrical relaxation and spin. Physical Review B, 2009, 80, .	1.1	56
61	Magneto-Coulomb Drag: Interplay of Electron-Electron Interactions and Landau Quantization. Physical Review Letters, 1996, 77, 1366-1369.	2.9	54
62	Theory of coherent time-dependent transport in one-dimensional multiband semiconductor superlattices. Physical Review B, 1996, 54, 17691-17700.	1.1	53
63	Microscopic theory of phonon-induced effects on semiconductor quantum dot decay dynamics in cavity QED. Physical Review B, 2012, 86, .	1.1	51
64	Electron transport in edge-disordered graphene nanoribbons. Physical Review B, 2011, 83, .	1.1	49
65	Surface-enhanced Raman spectroscopy: nonlocal limitations. Optics Letters, 2012, 37, 2538.	1.7	48
66	Thermally Driven Pure Spin and Valley Currents via the Anomalous Nernst Effect in Monolayer Group-VI Dichalcogenides. Physical Review Letters, 2015, 115, 246601.	2.9	47
67	Microscopic theory of indistinguishable single-photon emission from a quantum dot coupled to a cavity: The role of non-Markovian phonon-induced decoherence. Physical Review B, 2013, 87, .	1.1	46
68	Strain-engineered Majorana zero energy modes and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Ï†</mml:mi><mml:mn>0</mml:mn></mml:msub></mml:r Josephson state in black phosphorus. Physical Review B, 2018, 98, .	1.1	46
69	Fundamental Limitations to Gain Enhancement in Periodic Media and Waveguides. Physical Review Letters, 2012, 108, 183903.	2.9	45
70	Ballistic tracks in graphene nanoribbons. Nature Communications, 2018, 9, 4426.	5.8	45
71	Probing nonlocal effects in metals with graphene plasmons. Physical Review B, 2018, 97, .	1.1	44
72	Monte Carlo algorithms for collisional broadening and intracollisional field effect in semiconductor highâ€field transport. Journal of Applied Physics, 1988, 64, 3072-3078.	1.1	42

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73	Numerical simulations of resonant tunneling in the presence of inelastic processes. Physical Review B, 1990, 41, 12327-12329.	1.1	42
74	Current noise spectrum of a quantum shuttle. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 29, 411-418.	1.3	40
75	Optical properties and optimization of electromagnetically induced transparency in strained InAs/GaAs quantum dot structures. Physical Review B, 2009, 80, .	1.1	40
76	Ab initiostudy of spin-dependent transport in carbon nanotubes with iron and vanadium adatoms. Physical Review B, 2008, 78, .	1.1	37
77	Time-dependent tunneling of wave-packets through heterostructures in an applied field. Superlattices and Microstructures, 1986, 2, 407-413.	1.4	36
78	Tunneling times in heterostructures. Superlattices and Microstructures, 1989, 6, 303-307.	1.4	36
79	Electronic transport in disordered graphene antidot lattice devices. Physical Review B, 2014, 90, .	1.1	36
80	Electron Waiting Times of a Cooper Pair Splitter. Physical Review Letters, 2018, 120, 087701.	2.9	35
81	Current responsivity of semiconductor superlattice THz-photon detectors. Journal of Applied Physics, 1999, 85, 3643-3654.	1.1	34
82	Coulomb Drag in Coherent Mesoscopic Systems. Physical Review Letters, 2001, 86, 1841-1844.	2.9	34
83	Modeling Transport in Ultrathin Si Nanowires: Charged versus Neutral Impurities. Nano Letters, 2008, 8, 2825-2828.	4.5	34
84	Localized Edge Vibrations and Edge Reconstruction by Joule Heating in Graphene Nanostructures. Physical Review Letters, 2010, 104, 036807.	2.9	34
85	Electronic properties of disordered graphene antidot lattices. Physical Review B, 2013, 87, .	1.1	34
86	Patched Green's function techniques for two-dimensional systems: Electronic behavior of bubbles and perforations in graphene. Physical Review B, 2015, 91, .	1.1	34
87	Thermoelectrics in Coulomb-coupled quantum dots: Cotunneling and energy-dependent lead couplings. Physical Review B, 2017, 96, .	1.1	34
88	Fraunhofer response and supercurrent spin switching in black phosphorus with strain and disorder. Physical Review B, 2018, 98, .	1.1	33
89	Nonequilibrium green function techniques applied to hot electron quantum transport. Solid-State Electronics, 1989, 32, 1265-1271.	0.8	32
90	Intershell resistance in multiwall carbon nanotubes: A Coulomb drag study. Physical Review B, 2005, 71, .	1.1	32

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91	Integral formulation of transport equations: Quantum theory versus Boltzmann equation. Physical Review B, 1985, 32, 2248-2253.	1.1	31
92	Sequential tunneling in doped superlattices: Fingerprints of impurity bands and photon-assisted tunneling. Physical Review B, 1997, 56, 13268-13278.	1.1	30
93	Failure of standard approximations of the exchange coupling in nanostructures. Physical Review B, 2007, 76, .	1.1	30
94	Electronic transport properties of fullerene functionalized carbon nanotubes:Ab initioand tight-binding calculations. Physical Review B, 2009, 80, .	1.1	30
95	Correlated Coulomb Drag in Capacitively Coupled Quantum-Dot Structures. Physical Review Letters, 2016, 116, 196801.	2.9	30
96	Tunnelling through a time-modulated barrier-relation to tunnelling times. Journal of Physics Condensed Matter, 1989, 1, 9027-9033.	0.7	28
97	Atomic carbon chains as spin-transmitters: An ab initio transport study. Europhysics Letters, 2010, 91, 37002.	0.7	28
98	Theoretical Analysis of a Dual-Probe Scanning Tunneling Microscope Setup on Graphene. Physical Review Letters, 2014, 112, 096801.	2.9	28
99	Symmetry-forbidden intervalley scattering by atomic defects in monolayer transition-metal dichalcogenides. Physical Review B, 2017, 96, .	1.1	27
100	Symmetry of superconducting correlations in displaced bilayers of graphene. Physical Review B, 2019, 99, .	1.1	27
101	Quantum surface-response of metals revealed by acoustic graphene plasmons. Nature Communications, 2021, 12, 3271.	5.8	27
102	Frictional Coulomb drag in strong magnetic fields. Physical Review B, 1997, 56, 10314-10325.	1.1	26
103	Quantum Computing via Defect States in Two-Dimensional Antidot Lattices. Nano Letters, 2005, 5, 2515-2518.	4.5	26
104	Quantum Interference Engineering of Nanoporous Graphene for Carbon Nanocircuitry. Journal of the American Chemical Society, 2019, 141, 13081-13088.	6.6	26
105	Simple models suffice for the single-dot quantum shuttle. New Journal of Physics, 2005, 7, 237-237.	1.2	25
106	Comparison of electromagnetically induced transparency schemes in semiconductor quantum dot structures: Impact of many-body interactions. Physical Review B, 2009, 79, .	1.1	25
107	Conductance quantization suppression in the quantum Hall regime. Nature Communications, 2018, 9, 659.	5.8	25
108	Correlated Topological States in Graphene Nanoribbon Heterostructures. Nano Letters, 2019, 19, 9045-9050.	4.5	25

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109	Electron Interference in Ballistic Graphene Nanoconstrictions. Physical Review Letters, 2016, 116, 186602.	2.9	24
110	Theory of phase-sensitive measurement of photon-assisted tunneling through a quantum dot. Physical Review B, 1998, 58, 9619-9622.	1.1	23
111	Fermi velocity renormalization in graphene probed by terahertz time-domain spectroscopy. 2D Materials, 2020, 7, 035009.	2.0	23
112	Field enhancement at metallic interfaces due to quantum confinement. Journal of Nanophotonics, 2011, 5, 051602.	0.4	22
113	Electronic and transport properties of kinked graphene. Beilstein Journal of Nanotechnology, 2013, 4, 103-110.	1.5	22
114	Rigorous Formulation of High-Field Quantum Transport Applied to the Case of Electrons Scattered by Dilute Resonant Impurities. Physical Review Letters, 1982, 49, 762-765.	2.9	21
115	Observation of Dynamical Franz-Keldysh Effect. Physica Status Solidi (B): Basic Research, 1997, 204, 52-54.	0.7	21
116	Nanostructured graphene for spintronics. Physical Review B, 2017, 95, .	1.1	21
117	Transient charging and discharging of spin-polarized electrons in a quantum dot. Physical Review B, 2007, 76, .	1.1	20
118	Electron and hole transport in disordered monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> : Atomic vacancy induced short-range and Coulomb disorder scattering. Physical Review B, 2019, 100, .	1.1	20
119	Control of superconducting pairing symmetries in monolayer black phosphorus. Physical Review B, 2019, 99, .	1.1	20
120	Atomistic theory for the damping of vibrational modes in monoatomic gold chains. Physical Review B, 2009, 80, .	1.1	18
121	Electron trajectories and magnetotransport in nanopatterned graphene under commensurability conditions. Physical Review B, 2017, 96, .	1.1	18
122	Role of diffusive surface scattering in nonlocal plasmonics. Journal of Physics Condensed Matter, 2020, 32, 395702.	0.7	18
123	Selfâ€consistent model for twoâ€dimensional accumulation layer states in resonant tunneling devices. Applied Physics Letters, 1991, 59, 2245-2247.	1.5	17
124	Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures. 2D Materials, 2019, 6, 015022.	2.0	17
125	Slow-light enhanced absorption in a hollow-core fiber. Optics Express, 2010, 18, 14270.	1.7	16
126	Self-consistent modelling of resonant tunnelling structures. Surface Science, 1992, 267, 392-395.	0.8	15

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127	Transport in silicon nanowires: role of radial dopant profile. Journal of Computational Electronics, 2008, 7, 324-327.	1.3	15
128	Spin qubits in antidot lattices. Physical Review B, 2008, 77, .	1.1	15
129	Graphene on graphene antidot lattices: Electronic and transport properties. Physical Review B, 2015, 91, .	1.1	15
130	Mesoscopic fluctuations of Coulomb drag between quasiballistic one-dimensional wires. Physical Review B, 2002, 65, .	1.1	14
131	Dual-probe spectroscopic fingerprints of defects in graphene. Physical Review B, 2014, 90, .	1.1	14
132	Plasma instabilities in high electric fields. Physical Review E, 1994, 50, 474-479.	0.8	13
133	Microscopic modelling of perpendicular electronic transport in doped multiple quantum wells. Physica Scripta, 1997, T69, 321-324.	1.2	13
134	Modeling of Inelastic Transport in One-Dimensional Metallic Atomic Wires. Journal of Computational Electronics, 2004, 3, 423-427.	1.3	13
135	Modelling of inelastic effects in molecular electronics. Journal of Physics: Conference Series, 2006, 35, 313-323.	0.3	13
136	Nanostructure design for surface-enhanced Raman spectroscopy -- prospects and limits. Journal of the European Optical Society-Rapid Publications, 0, 3, .	0.9	13
137	Corrections to the density-functional theory electronic spectrum: copper phthalocyanine. Applied Physics A: Materials Science and Processing, 2009, 95, 257-263.	1.1	13
138	Screening in graphene antidot lattices. Physical Review B, 2011, 84, .	1.1	13
139	Quantum transport in graphene in presence of strain-induced pseudo-Landau levels. 2D Materials, 2016, 3, 034005.	2.0	13
140	Quantum corrections to the Monte Carlo solution of hot-electron transport in semiconductors. Solid-State Electronics, 1988, 31, 535-538.	0.8	12
141	Quantum Kinetic Equations for Strongly Inhomogenous Systems. Physica Scripta, 1989, T25, 329-332.	1.2	12
142	Elastic and inelastic resonant tunnelling in narrow-band systems: application to transport in minibands of semiconductor superlattices. Journal of Physics Condensed Matter, 1990, 2, 8725-8729.	0.7	12
143	Quantum transport theory for electron-phonon systems in strong electric fields. Physical Review Letters, 1992, 68, 2826-2829.	2.9	12
144	TMR effect in a FM-QD-FM system. Brazilian Journal of Physics, 2004, 34, 565-567.	0.7	12

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145	Plasmonic nanostructures: local versus nonlocal response. Proceedings of SPIE, 2010, , .	0.8	12
146	Electronic transport in graphene-based structures: An effective cross-section approach. Physical Review B, 2012, 85, .	1.1	12
147	Electron polarization function and plasmons in metallic armchair graphene nanoribbons. Physical Review B, 2015, 91, .	1.1	12
148	Valley Hall effect and nonlocal resistance in locally gapped graphene. Physical Review B, 2021, 103, .	1.1	12
149	Josephson effect in graphene bilayers with adjustable relative displacement. Physical Review Research, 2020, 2, .	1.3	12
150	Studies of the magnetic ordering and spin structure ofK3Fe(CN)6. Physical Review B, 1977, 15, 1445-1457.	1.1	11
151	Screening and collective modes in disordered graphene antidot lattices. Physical Review B, 2013, 88, .	1.1	11
152	Electronic transport in graphene nanoribbons with sublattice-asymmetric doping. Physical Review B, 2016, 93, .	1.1	11
153	Investigation of the magnetism of terbium ethylsulphate below 1 K using the Faraday effect. Physical Review B, 1975, 11, 4409-4420.	1.1	10
154	Time-dependent transport in mesoscopic systems: general formalism and applications. Semiconductor Science and Technology, 1994, 9, 926-929.	1.0	10
155	Dephasing in semiconductorâ€“superconductor structures by coupling to a voltage probe. Superlattices and Microstructures, 2000, 28, 67-76.	1.4	10
156	Bubbles in graphene - a computational study. Journal of Physics: Conference Series, 2015, 647, 012022.	0.3	10
157	Plasma wave instabilities in nonequilibrium graphene. Physical Review B, 2016, 94, .	1.1	10
158	All-graphene edge contacts: Electrical resistance of graphene T-junctions. Carbon, 2016, 101, 101-106.	5.4	10
159	Charge and spin transport anisotropy in nanopatterned graphene. JPhys Materials, 2018, 1, 015005.	1.8	10
160	Fluctuation-driven Coulomb drag in interacting quantum dot systems. Physical Review B, 2019, 100, .	1.1	10
161	Possible THz Gain in Superlattices at a Stable Operation Point. Physica Status Solidi (B): Basic Research, 1997, 204, 95-97.	0.7	9
162	Current and current fluctuations in quantum shuttles. Physics of Fluids, 2005, 17, 100613.	1.6	9

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163	Scattering cross section of metal catalyst atoms in silicon nanowires. Physical Review B, 2010, 81, .	1.1	9
164	Magnetic edge states and magnetotransport in graphene antidot barriers. Physical Review B, 2016, 94, .	1.1	9
165	Strong Plasmon-Phonon Splitting and Hybridization in 2D Materials Revealed through a Self-Energy Approach. ACS Photonics, 2017, 4, 2908-2915.	3.2	9
166	Tunable valley Hall effect in gate-defined graphene superlattices. Physical Review B, 2019, 100, .	1.1	9
167	MoirÃ© effects in graphene-hBN heterostructures. Physical Review Research, 2020, 2, .	1.3	9
168	Resonant tunneling in a pulsed phonon field. Physical Review B, 1999, 59, 7656-7662.	1.1	8
169	Classification of DNA nucleotides with transverse tunneling currents. Nanotechnology, 2017, 28, 015502.	1.3	8
170	Signatures of adatom effects in the quasiparticle spectrum of Li-doped graphene. Physical Review B, 2019, 100, .	1.1	8
171	Spin-Caloritronic Batteries. Physical Review Applied, 2017, 8, .	1.5	8
172	Have mysterious topological valley currents been observed in graphene superlattices?. JPhys Materials, 2022, 5, 021001.	1.8	8
173	Quantum electron-phonon transport equations revisited. Journal of Physics F: Metal Physics, 1983, 13, L203-L206.	1.6	7
174	Dilute resonant scatterers in a parabolic band: Density of states as a function of scattering strength. Physical Review B, 1983, 28, 4628-4634.	1.1	7
175	Model spectral density for hot-electron quantum transport. Physica Scripta, 1988, 38, 117-121.	1.2	7
176	Position broadening effect in hot-electron transport. Solid-State Electronics, 1989, 32, 1167-1171.	0.8	7
177	Optics of Excitons in THz Irradiated Quantum Wells. Physica Status Solidi A, 1997, 164, 553-556.	1.7	7
178	Impact of interface roughness on perpendicular transport and domain formation in superlattices. Superlattices and Microstructures, 1998, 23, 297-300.	1.4	7
179	Conductance enhancement in quantum-point-contact semiconductor-superconductor devices. Physical Review B, 1999, 60, 13762-13769.	1.1	7
180	Sign reversal of drag in bilayer systems with in-plane periodic potential modulation. Physical Review B, 2002, 66, .	1.1	7

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181	Clar sextets in square graphene antidot lattices. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 967-970.	1.3	7
182	Robust band gap and half-metallicity in graphene with triangular perforations. Physical Review B, 2016, 93, .	1.1	7
183	Coulomb drag between a carbon nanotube and monolayer graphene. Physical Review Research, 2020, 2, .	1.3	7
184	Numerical studies of tunneling in a nonharmonic time-dependent potential. Physical Review B, 1993, 47, 10446-10451.	1.1	6
185	Contact resistance of quantum tubes. Superlattices and Microstructures, 1999, 26, 351-361.	1.4	6
186	Plasmon-mediated Coulomb drag between graphene waveguides. Physical Review B, 2014, 89, .	1.1	6
187	Plasmons in Dimensionally Mismatched Coulomb Coupled Graphene Systems. Physical Review Letters, 2017, 119, 126801.	2.9	6
188	Anomalous skin effect with general elastic boundary scattering. Journal of Physics F: Metal Physics, 1985, 15, 1951-1962.	1.6	5
189	Quantum theory of shuttling instability in a movable quantum dot array. Semiconductor Science and Technology, 2004, 19, S430-S432.	1.0	5
190	Influence of many-particle interactions on slow light phenomena in quantum dots. Journal of Physics: Conference Series, 2008, 107, 012005.	0.3	5
191	Influence of confining potentials on the exchange coupling in double quantum dots. Physical Review B, 2010, 81, .	1.1	5
192	A model study of phonon-assisted Fano resonances. Journal of Physics C: Solid State Physics, 1984, 17, 4369-4387.	1.5	4
193	A model of dynamical disorder in a uniform time-dependent electric field. Journal of Physics A, 1987, 20, 2895-2902.	1.6	4
194	Transport in a Weakly-Coupled Superlattice: A Quantitative Approach for Photon-Assisted Tunneling. Physica Status Solidi (B): Basic Research, 1997, 204, 73-76.	0.7	4
195	NONEQUILIBRIUM GREEN FUNCTION MODELLING OF TRANSPORT IN MESOSCOPIC SYSTEMS. , 2003, , .		4
196	Nanoplasmonics beyond Ohm's law. , 2012, , .		4
197	Gate electrostatics and quantum capacitance in ballistic graphene devices. Physical Review B, 2019, 99, .	1.1	4
198	A NON-PERTURBATIVE GREEN FUNCTION TECHNIQUE FOR CALCULATIONS OF NON-LINEAR TRANSPORT PROPERTIES. Journal De Physique Colloque, 1981, 42, C7-301-C7-306.	0.2	4

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199	Coherent transport in superlattices and tunneling structures. Physica Status Solidi (B): Basic Research, 1995, 188, 405-415.	0.7	3
200	Nonequilibrium absorption in semiconductors and the dynamical Franz-Keldysh effect. Physica Scripta, 1997, T69, 177-180.	1.2	3
201	Linear Optical Absorption in THz Irradiated Undoped Semiconductor Superlattices. Physica Status Solidi (B): Basic Research, 1997, 204, 55-57.	0.7	3
202	Simulations of interference effects in gated two-dimensional ballistic electron systems. Physical Review B, 1999, 60, 8191-8198.	1.1	3
203	Shuttle instabilities: semiclassical phase analysis. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 721-724.	1.3	3
204	Coulomb drag in multiwall armchair carbon nanotubes. Semiconductor Science and Technology, 2004, 19, S433-S435.	1.0	3
205	Nonequilibrium Green Function Techniques Applied to Hot-Electron Quantum Transport. NATO ASI Series Series B: Physics, 1991, , 133-144.	0.2	3
206	Hot electrons in superlattices: quantum transport versus Boltzmann equation. Physica B: Condensed Matter, 1999, 272, 157-159.	1.3	2
207	TIME-DEPENDENT TRANSPORT IN INTERACTING MESOSCOPIC SYSTEMS. , 2000, , .		2
208	Virtual photon contribution to frictional drag in double-layer devices. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 312, 123-129.	0.9	2
209	Noise and Bistabilities in Quantum Shuttles. AIP Conference Proceedings, 2005, , .	0.3	2
210	Quantum transport theory. , 1998, , 127-171.		2
211	Transient response studied within the integral formulation of high-field quantum transport. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1985, 134, 148-152.	0.9	1
212	Gauge-invariant description of nonlinear quantum transport of weakly coupled electron-phonon systems in uniform electric fields. Semiconductor Science and Technology, 1992, 7, B33-B35.	1.0	1
213	Coulomb Drag in the Mesoscopic Regime. Physica Scripta, 2002, T101, 177.	1.2	1
214	Modelling of Quantum Electromechanical Systems. Journal of Computational Electronics, 2004, 3, 367-371.	1.3	1
215	UskovetÂal.Reply:. Physical Review Letters, 2006, 96, .	2.9	1
216	Quantum information processing using designed defects in 2D antidot lattices. AIP Conference Proceedings, 2007, , .	0.3	1

#	Article	IF	Citations
217	Designed defects in 2D antidot lattices for quantum information processing. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1075-1077.	1.3	1
218	Ab initio vibrations in nonequilibrium nanowires. Journal of Physics: Conference Series, 2010, 220, 012010.	0.3	1
219	Electronic Transport in Nanowires at Different Length Scales. Mathematics in Industry, 2008, , 404-420.	0.1	1
220	QUANTUM CORRECTIONS TO THE MONTE CARLO SOLUTION OF HOT-ELECTRON TRANSPORT IN SEMICONDUCTORS. , 1988, , 535-538.		0
221	Greenâ€™s Function Methods: Nonequilibrium, High-Field Transport. , 1992, , 141-168.		0
222	Wave Packet Studies of Tunneling through Time-Modulated Semiconductor Heterostructures. , 1992, , 179-192.		0
223	Coulomb drag: a probe of electron interactions in coupled quantum wells. , 0, , .		0
224	Photon side-bands in mesoscopics. Superlattices and Microstructures, 1998, 23, 843-851.	1.4	0
225	Strong impact of impurity bands on domain formation in superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 1998, 2, 493-497.	1.3	0
226	Microscopic Theory of Transconductivity. VLSI Design, 1998, 6, 87-90.	0.5	0
227	Open Problems In Noise In NEMS. AIP Conference Proceedings, 2005, , .	0.3	0
228	First-principles Theory of Inelastic Transport and Local Heating in Atomic Gold Wires. AIP Conference Proceedings, 2007, , .	0.3	0
229	Are there novel resonances in nanoplasmonic structures due to nonlocal response?. Proceedings of SPIE, 2012, , .	0.8	0
230	Thermoelectric properties of disordered graphene antidot devices. , 2012, , .		0
231	Transport properties of nanostructured graphene. , 2017, , .		0
232	Quantum Surface-Response of Metals Probed by Graphene Plasmons. , 2021, , .		0
233	Fundamental limitations to gain enhancement in slow-light photonic structures. , 2012, , .		0
234	Interacting and Coherent Time-Dependent Transport in Semiconductor Heterostructures. NATO ASI Series Series B: Physics, 1995, , 301-327.	0.2	0

#	Article	IF	Citations
235	Transport Studies in Semiconductor Heterostructures. , 1996, , 439-457.		0