

Hongqi Xu

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252
papers

10,468
citations

48
h-index

96
g-index

276
ext. papers

11,618
ext. citations

5.3
avg, IF

6.24
L-index

#	Paper	IF	Citations
252	Anomalous zero-bias conductance peak in a Nb-InSb nanowire-Nb hybrid device. <i>Nano Letters</i> , 2012 , 12, 6414-9	11.5	1210
251	InP nanowire array solar cells achieving 13.8% efficiency by exceeding the ray optics limit. <i>Science</i> , 2013 , 339, 1057-60	33.3	962
250	Superconductor-nanowire devices from tunneling to the multichannel regime: Zero-bias oscillations and magnetoconductance crossover. <i>Physical Review B</i> , 2013 , 87,	3.3	576
249	Covalently bonded single-molecule junctions with stable and reversible photoswitched conductivity. <i>Science</i> , 2016 , 352, 1443-5	33.3	529
248	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting BiOSe. <i>Nature Nanotechnology</i> , 2017 , 12, 530-534	28.7	332
247	Valley-dependent Brewster angles and Goos-Hänchen effect in strained graphene. <i>Physical Review Letters</i> , 2011 , 106, 176802	7.4	210
246	Giant, level-dependent g factors in InSb nanowire quantum dots. <i>Nano Letters</i> , 2009 , 9, 3151-6	11.5	201
245	Symmetry of Spin Transport in Two-Terminal Waveguides with a Spin-Orbital Interaction and Magnetic Field Modulations. <i>Physical Review Letters</i> , 2005 , 94,	7.4	179
244	Thermoelectric efficiency at maximum power in low-dimensional systems. <i>Physical Review B</i> , 2010 , 82,	3.3	170
243	Unified treatment of fluorescence and raman scattering processes near metal surfaces. <i>Physical Review Letters</i> , 2004 , 93, 243002	7.4	169
242	Electrical properties of three-terminal ballistic junctions. <i>Applied Physics Letters</i> , 2001 , 78, 2064-2066	3.4	135
241	Patterning two-dimensional chalcogenide crystals of Bi ₂ Se ₃ and In ₂ Se ₃ and efficient photodetectors. <i>Nature Communications</i> , 2015 , 6, 6972	17.4	133
240	Room-temperature near-infrared photodetectors based on single heterojunction nanowires. <i>Nano Letters</i> , 2014 , 14, 694-8	11.5	118
239	Efficient light management in vertical nanowire arrays for photovoltaics. <i>Optics Express</i> , 2013 , 21 Suppl 3, A558-75	3.3	117
238	Magnetic barrier on strained graphene: A possible valley filter. <i>Physical Review B</i> , 2010 , 82,	3.3	116
237	Wrinkle-Free Single-Crystal Graphene Wafer Grown on Strain-Engineered Substrates. <i>ACS Nano</i> , 2017 , 11, 12337-12345	16.7	112
236	Nonlinear operation of GaInAs/InP-based three-terminal ballistic junctions. <i>Applied Physics Letters</i> , 2001 , 79, 1384-1386	3.4	112

235	Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow. <i>Advanced Materials</i> , 2016 , 28, 8968-8974	24	110
234	Tunable spin polarization in a two-dimensional electron gas modulated by a ferromagnetic metal stripe and a Schottky metal stripe. <i>Physical Review B</i> , 2004 , 70,	3.3	103
233	Photovoltaics with piezoelectric core-shell nanowires. <i>Nano Letters</i> , 2010 , 10, 1108-12	11.5	101
232	Bias-voltage-induced asymmetry in nanoelectronic Y-branches. <i>Applied Physics Letters</i> , 2001 , 79, 3287-3289	3.4	94
231	Towards super-clean graphene. <i>Nature Communications</i> , 2019 , 10, 1912	17.4	89
230	Nonlinear thermovoltage and thermocurrent in quantum dots. <i>New Journal of Physics</i> , 2013 , 15, 105011	2.9	89
229	Colorful InAs nanowire arrays: from strong to weak absorption with geometrical tuning. <i>Nano Letters</i> , 2012 , 12, 1990-5	11.5	87
228	A quantum dot ratchet: Experiment and theory. <i>Europhysics Letters</i> , 1998 , 44, 341-347	1.6	85
227	Fabrication of quantum devices by single-level manipulation of nanoparticles with an atomic force microscope. <i>Applied Physics Letters</i> , 1998 , 72, 548-550	3.4	81
226	Probing strain in bent semiconductor nanowires with Raman spectroscopy. <i>Nano Letters</i> , 2010 , 10, 1280-1	11.5	79
225	Surface Engineering of Copper Foils for Growing Centimeter-Sized Single-Crystalline Graphene. <i>ACS Nano</i> , 2016 , 10, 2922-9	16.7	78
224	Microwave detection at 110 Ghz by nanowires with broken symmetry. <i>Nano Letters</i> , 2005 , 5, 1423-7	11.5	76
223	Decay kinetic properties of atoms in photonic crystals with absolute gaps. <i>Physical Review Letters</i> , 2003 , 91, 113904	7.4	76
222	Scattering-matrix method for ballistic electron transport: Theory and an application to quantum antidot arrays. <i>Physical Review B</i> , 1994 , 50, 8469-8478	3.3	76
221	Coupling of light into nanowire arrays and subsequent absorption. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 7183-7	1.3	74
220	Quantum ratchets and quantum heat pumps. <i>Applied Physics A: Materials Science and Processing</i> , 2002 , 75, 237-246	2.6	74
219	Diode and transistor behaviors of three-terminal ballistic junctions. <i>Applied Physics Letters</i> , 2002 , 80, 853-855	3.4	74
218	Supercurrent and multiple Andreev reflections in an InSb nanowire Josephson junction. <i>Nano Letters</i> , 2012 , 12, 228-33	11.5	73

217	Multimode electron transport through quantum waveguides with spin-orbit interaction modulation: Applications of the scattering matrix formalism. <i>Physical Review B</i> , 2005 , 72,	3-3	71
216	Electronic structure of neutral and charged vacancies in GaAs. <i>Physical Review B</i> , 1990 , 41, 5979-5990	3-3	64
215	Spin states of holes in Ge/Si nanowire quantum dots. <i>Physical Review Letters</i> , 2008 , 101, 186802	7-4	63
214	Parity independence of the zero-bias conductance peak in a nanowire based topological superconductor-quantum dot hybrid device. <i>Scientific Reports</i> , 2014 , 4, 7261	4-9	62
213	Photoemission electron microscopy using extreme ultraviolet attosecond pulse trains. <i>Review of Scientific Instruments</i> , 2009 , 80, 123703	1-7	62
212	Strain in semiconductor core-shell nanowires. <i>Journal of Applied Physics</i> , 2009 , 106, 053508	2-5	62
211	Free-Standing Two-Dimensional Single-Crystalline InSb Nanosheets. <i>Nano Letters</i> , 2016 , 16, 834-41	11-5	59
210	Lineshape of the thermopower of quantum dots. <i>New Journal of Physics</i> , 2012 , 14, 033041	2-9	59
209	Surface-enhanced Raman scattering of rhodamine 6G on nanowire arrays decorated with gold nanoparticles. <i>Nanotechnology</i> , 2008 , 19, 275712	3-4	50
208	Electrical properties of self-assembled branched InAs nanowire junctions. <i>Nano Letters</i> , 2008 , 8, 1100-4	11-5	50
207	A novel frequency-multiplication device based on three-terminal ballistic junction. <i>IEEE Electron Device Letters</i> , 2002 , 23, 377-379	4-4	50
206	Photoelectrical response of hybrid graphene-PbS quantum dot devices. <i>Applied Physics Letters</i> , 2013 , 103, 143119	3-4	48
205	Nonlinear electrical properties of three-terminal junctions. <i>Applied Physics Letters</i> , 2006 , 89, 092124	3-4	48
204	Correlation-induced conductance suppression at level degeneracy in a quantum dot. <i>Physical Review Letters</i> , 2010 , 104, 186804	7-4	47
203	Electron transport through one-dimensional lateral surface superlattices in magnetic fields. <i>Physical Review B</i> , 1995 , 52, 5803-5812	3-3	46
202	Theory of nonlinear ballistic transport in quasi-one-dimensional constrictions. <i>Physical Review B</i> , 1993 , 47, 15630-15637	3-3	46
201	Elastic and piezoelectric properties of zincblende and wurtzite crystalline nanowire heterostructures. <i>Advanced Materials</i> , 2012 , 24, 4692-706	24	45
200	Asymmetric nonlinear conductance of quantum dots with broken inversion symmetry. <i>Physical Review B</i> , 2000 , 61, 15914-15926	3-3	42

199	Charge transport in InAs nanowire Josephson junctions. <i>Physical Review B</i> , 2014 , 89,	3.3	41
198	Novel nanoelectronic triodes and logic devices with TBJs. <i>IEEE Electron Device Letters</i> , 2004 , 25, 164-166	4.4	41
197	Weak antilocalization and electron-electron interaction in coupled multiple-channel transport in a Bi ₂ Se ₃ thin film. <i>Nanoscale</i> , 2016 , 8, 1879-85	7.7	40
196	Spin filtering in single magnetic barrier structures revisited. <i>Applied Physics Letters</i> , 2006 , 88, 032502	3.4	40
195	Discontinuity in the phase evolution of electron transport in a quantum channel with attached quantum dots. <i>Physical Review B</i> , 1998 , 57, 11903-11906	3.3	40
194	Nitrogen cluster doping for high-mobility/conductivity graphene films with millimeter-sized domains. <i>Science Advances</i> , 2019 , 5, eaaw8337	14.3	39
193	Electronic structure of nanometer-scale GaAs whiskers. <i>Applied Physics Letters</i> , 2002 , 81, 1309-1311	3.4	39
192	Ballistic transport in quantum channels modulated with double-bend structures. <i>Physical Review B</i> , 1993 , 47, 9537-9544	3.3	39
191	Scattering matrix method for optical excitation of surface plasmons in metal films with periodic arrays of subwavelength holes. <i>Physical Review B</i> , 2011 , 83,	3.3	38
190	Giant polarization anisotropy in optical transitions of free-standing InP nanowires. <i>Physical Review B</i> , 2004 , 70,	3.3	38
189	Negative differential capacitance of quantum dots. <i>Physical Review B</i> , 2002 , 65,	3.3	38
188	Strong spin-orbit interaction and magnetotransport in semiconductor BiOSe nanoplates. <i>Nanoscale</i> , 2018 , 10, 2704-2710	7.7	37
187	Spin filtering and spin accumulation in an electron stub waveguide with spin-orbit interaction. <i>Physical Review B</i> , 2007 , 76,	3.3	36
186	Spin Hall effect and zitterbewegung in an electron waveguide. <i>Physical Review B</i> , 2006 , 74,	3.3	35
185	Interface engineering of electronic properties of graphene/boron nitride lateral heterostructures. <i>2D Materials</i> , 2015 , 2, 041001	5.9	34
184	Spin-3/2 physics of semiconductor hole nanowires: Valence-band mixing and tunable interplay between bulk-material and orbital bound-state spin splittings. <i>Physical Review B</i> , 2009 , 79,	3.3	34
183	Electronic Structure of [100]-Oriented Free-Standing Semiconductor Nanowires. <i>Nano Letters</i> , 2004 , 4, 2409-2414	11.5	33
182	Fabrication and characterization of bilayer metal wire-grid polarizer using nanoimprint lithography on flexible plastic substrate. <i>Microelectronic Engineering</i> , 2011 , 88, 3108-3112	2.5	32

181	Electron-Hole Symmetry Breaking in Charge Transport in Nitrogen-Doped Graphene. <i>ACS Nano</i> , 2017 , 11, 4641-4650	16.7	31
180	A Force-Engineered Lint Roller for Superclean Graphene. <i>Advanced Materials</i> , 2019 , 31, e1902978	24	31
179	GaSb nanowire single-hole transistor. <i>Applied Physics Letters</i> , 2011 , 99, 262104	3.4	31
178	Electronic structure of [100]-oriented free-standing InAs and InP nanowires with square and rectangular cross sections. <i>Physical Review B</i> , 2006 , 73,	3.3	31
177	InSb Nanowire Field-Effect Transistors and Quantum-Dot Devices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011 , 17, 907-914	3.8	30
176	Low-Temperature and Rapid Growth of Large Single-Crystalline Graphene with Ethane. <i>Small</i> , 2018 , 14, 1702916	11	30
175	High critical-current superconductor-InAs nanowire-superconductor junctions. <i>Nano Letters</i> , 2012 , 12, 5622-5	11.5	29
174	Frequency mixing and phase detection functionalities of three-terminal ballistic junctions. <i>Nanotechnology</i> , 2007 , 18, 195205	3.4	29
173	Tip-enhanced Raman scattering of p-thiocresol molecules on individual gold nanoparticles. <i>Applied Physics Letters</i> , 2008 , 92, 093110	3.4	28
172	Method of calculations for electron transport in multiterminal quantum systems based on real-space lattice models. <i>Physical Review B</i> , 2002 , 66,	3.3	28
171	Drastically increased absorption in vertical semiconductor nanowire arrays: A non-absorbing dielectric shell makes the difference. <i>Nano Research</i> , 2012 , 5, 863-874	10	27
170	A Novel SR Latch Device Realized by Integration of Three-Terminal Ballistic Junctions in InGaAs/InP. <i>IEEE Electron Device Letters</i> , 2008 , 29, 540-542	4.4	27
169	Signatures of Wigner localization in epitaxially grown nanowires. <i>Physical Review B</i> , 2011 , 83,	3.3	26
168	High frequency characterization of a GaInAs/InP electronic waveguide T-branch switch. <i>Journal of Applied Physics</i> , 2002 , 91, 2398-2402	2.5	26
167	Quantized conductance and its correlation to the supercurrent in a nanowire connected to superconductors. <i>Nano Letters</i> , 2013 , 13, 3614-7	11.5	25
166	Suspended InAs nanowire gate-all-around field-effect transistors. <i>Applied Physics Letters</i> , 2014 , 105, 113106	3.4	25
165	Electronic structure of hydrogen-vacancy complexes in crystalline silicon: A theoretical study. <i>Physical Review B</i> , 1992 , 46, 1403-1422	3.3	25
164	Electronic structure of neutral and charged vacancies in Ga-related III-V compound semiconductors. <i>Journal of Applied Physics</i> , 1990 , 68, 4077-4086	2.5	25

163	Phase transition in hybrid superconductor-InSb nanowire quantum dot devices. <i>Physical Review B</i> , 2017 , 95,	3-3	24
162	Memristive and Memcapacitive Characteristics of a Au/TiO ₂ /InP/InGaAs Diode. <i>IEEE Electron Device Letters</i> , 2011 , 32, 131-133	4-4	24
161	Strain distributions in lattice-mismatched semiconductor core-shell nanowires. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 827		24
160	Generation of spin polarization in two-terminal electron waveguides by spin-orbit interaction and magnetic field modulations. <i>Physical Review B</i> , 2005 , 72,	3-3	24
159	Electronic structure of free-standing GaAs/AlGaAs nanowire superlattices. <i>Physical Review B</i> , 2006 , 73,	3-3	24
158	Tunable nonlinear current-voltage characteristics of three-terminal ballistic nanojunctions. <i>Applied Physics Letters</i> , 2003 , 83, 2369-2371	3-4	24
157	Supercurrent through InAs nanowires with highly transparent superconducting contacts. <i>Nanotechnology</i> , 2011 , 22, 445701	3-4	22
156	Dimension Engineering of High-Quality InAs Nanostructures on a Wafer Scale. <i>Nano Letters</i> , 2019 , 19, 1632-1642	11.5	22
155	Coherent Charge Transport in Ballistic InSb Nanowire Josephson Junctions. <i>Scientific Reports</i> , 2016 , 6, 24822	4-9	21
154	Transport studies of electron-hole and spin-orbit interaction in GaSb/InAsSb core-shell nanowire quantum dots. <i>Physical Review B</i> , 2015 , 91,	3-3	21
153	Detection of charge states in nanowire quantum dots using a quantum point contact. <i>Applied Physics Letters</i> , 2007 , 90, 172112	3-4	21
152	Effects of boundary roughness on the conductance of quantum wires. <i>Applied Physics Letters</i> , 2000 , 77, 2364-2366	3-4	21
151	A novel electrical property of three-terminal ballistic junctions and its applications in nanoelectronics. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002 , 13, 942-945	3	20
150	Phase-coherent transport and spin relaxation in InAs nanowires grown by molecule beam epitaxy. <i>Applied Physics Letters</i> , 2015 , 106, 173105	3-4	19
149	Electrical characteristics of field-effect transistors based on indium arsenide nanowire thinner than 10 nm. <i>Applied Physics Letters</i> , 2014 , 105, 143101	3-4	19
148	Electron-electron interaction in a narrow, disordered electron gas in nonequilibrium. <i>Physical Review B</i> , 1997 , 55, 4061-4064	3-3	19
147	Nanoimprint lithography for the fabrication of interdigitated cantilever arrays. <i>Nanotechnology</i> , 2006 , 17, 1906-1910	3-4	19
146	Quantum effects in the transport properties of nanoelectronic three-terminal Y-junction devices. <i>Physical Review B</i> , 2003 , 67,	3-3	19

145	Cooper-pair splitting in two parallel InAs nanowires. <i>New Journal of Physics</i> , 2018 , 20, 063021	2.9	18
144	Formation of long single quantum dots in high quality InSb nanowires grown by molecular beam epitaxy. <i>Nanoscale</i> , 2015 , 7, 14822-8	7.7	17
143	Structural and optical properties of self-catalytic GaAs:Mn nanowires grown by molecular beam epitaxy on silicon substrates. <i>Nanoscale</i> , 2013 , 5, 7410-8	7.7	17
142	Field-orientation dependence of the Zeeman spin splitting in (In,Ga)As quantum point contacts. <i>Physical Review B</i> , 2010 , 81,	3.3	17
141	Gate-defined quantum-dot devices realized in InGaAs/InP by incorporating a HfO ₂ layer as gate dielectric. <i>Applied Physics Letters</i> , 2009 , 94, 042114	3.4	17
140	Spin current diode based on an electron waveguide with spin-orbit interaction. <i>Applied Physics Letters</i> , 2008 , 92, 102111	3.4	17
139	Conductance oscillations induced by longitudinal resonant states in heteroepitaxially defined Ga _{0.25} In _{0.75} As/InP electron waveguides. <i>Applied Physics Letters</i> , 2000 , 76, 2274-2276	3.4	17
138	Two-Dimensional Quantum Transport in Free-Standing InSb Nanosheets. <i>Nano Letters</i> , 2019 , 19, 561-569	11.5	17
137	Signature of quantum Griffiths singularity state in a layered quasi-one-dimensional superconductor. <i>Nature Communications</i> , 2018 , 9, 4656	17.4	17
136	Epitaxial Growth of Ternary Topological Insulator Bi Te Se 2D Crystals on Mica. <i>Small</i> , 2017 , 13, 1603572	11	16
135	Anisotropic Pauli Spin-Blockade Effect and Spin-Orbit Interaction Field in an InAs Nanowire Double Quantum Dot. <i>Nano Letters</i> , 2018 , 18, 4741-4747	11.5	16
134	Scattering matrix method for multimode electron transport through quantum wires under a local magnetic field modulation and spin-orbit interaction. <i>Physical Review B</i> , 2006 , 74,	3.3	16
133	Measurements of the spin-orbit interaction and Landé factor in a pure-phase InAs nanowire double quantum dot in the Pauli spin-blockade regime. <i>Applied Physics Letters</i> , 2016 , 109, 053106	3.4	15
132	Nonlinear electrical properties of Si three-terminal junction devices. <i>Applied Physics Letters</i> , 2010 , 97, 242106	3.4	15
131	Quantum dots with interacting electrons: Energy spectra and magnetization. <i>Physica B: Condensed Matter</i> , 1998 , 256-258, 152-156	2.8	15
130	Electron transport in finite one-dimensional quantum-dot arrays. <i>Superlattices and Microstructures</i> , 1992 , 12, 237-242	2.8	15
129	Electronic structure of the isolated vacancies and divacancy in InP. <i>Physical Review B</i> , 1990 , 42, 11295-11302	3.02	15
128	Schottky barrier heights at the interfaces between pure-phase InAs nanowires and metal contacts. <i>Journal of Applied Physics</i> , 2016 , 119, 054304	2.5	15

127	InAs/GaSb core-shell nanowires grown on Si substrates by metal-organic chemical vapor deposition. <i>Nanotechnology</i> , 2016 , 27, 275601	3-4	15
126	Mott variable-range hopping transport in a MoS nanoflake.. <i>RSC Advances</i> , 2019 , 9, 17885-17890	3-7	14
125	Coherent Transport in a Linear Triple Quantum Dot Made from a Pure-Phase InAs Nanowire. <i>Nano Letters</i> , 2017 , 17, 4158-4164	11.5	13
124	Optical far-field method with subwavelength accuracy for the determination of nanostructure dimensions in large-area samples. <i>Nano Letters</i> , 2013 , 13, 2662-7	11.5	13
123	Electrical properties and logic function of multibranch junction structures. <i>Applied Physics Letters</i> , 2005 , 86, 253510	3-4	13
122	Scattering-matrix formalism of electron transport through three-terminal quantum structures: formulation and application to Y-junction devices. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 12513-12528	1.8	13
121	Single-electron tunneling effects in a metallic double dot device. <i>Applied Physics Letters</i> , 2002 , 80, 667-669	3-4	13
120	Effects of charged self-assembled quantum dots on two-dimensional quantum transport. <i>Applied Physics Letters</i> , 2000 , 76, 1704-1706	3-4	13
119	Theory of ballistic transport through a 3D-1D-3D quantum system. <i>Physical Review B</i> , 1993 , 48, 8878-8884	3-3	13
118	Conductance fluctuations in periodic antidot arrays. <i>Physical Review B</i> , 1994 , 50, 12254-12257	3-3	13
117	k.p theory of freestanding narrow band gap semiconductor nanowires. <i>AIP Advances</i> , 2016 , 6, 125109	1.5	13
116	Dominant nonlocal superconducting proximity effect due to electron-electron interaction in a ballistic double nanowire. <i>Science Advances</i> , 2019 , 5, eaaw2194	14.3	12
115	Synthesis, properties, and top-gated metaloxide semiconductor field-effect transistors of p-type GaSb nanowires. <i>RSC Advances</i> , 2013 , 3, 19834	3-7	12
114	Excitations of surface plasmon polaritons in double layer metal grating structures. <i>Applied Physics Letters</i> , 2012 , 100, 091111	3-4	12
113	Landlike formula for the g factors of hole-nanowire subband edges. <i>Physical Review B</i> , 2008 , 78,	3-3	12
112	Nanoimprint lithography for fabrication of three-terminal ballistic junctions in InP/GaInAs. <i>Nanotechnology</i> , 2002 , 13, 666-668	3-4	12
111	Fractal structure of spectra in one-dimensional incommensurate systems. <i>Journal of Physics C: Solid State Physics</i> , 1987 , 20, 5999-6012		12
110	Measurements of Strain and Bandgap of Coherently Epitaxially Grown Wurtzite InAsP-InP Core-Shell Nanowires. <i>Nano Letters</i> , 2019 , 19, 2674-2681	11.5	11

109	Tunable Low Loss 1D Surface Plasmons in InAs Nanowires. <i>Advanced Materials</i> , 2018 , 30, e1802551	2.4	11
108	Phase, zeros and poles of the transmission in quantum waveguides with an attached resonator and waveguide superlattices. <i>Superlattices and Microstructures</i> , 1999 , 25, 79-86	2.8	11
107	Schottky barrier and contact resistance of InSb nanowire field-effect transistors. <i>Nanotechnology</i> , 2016 , 27, 275204	3.4	10
106	Tunnel spectroscopy of Majorana bound states in topological superconductor/quantum dot Josephson junctions. <i>Physical Review B</i> , 2014 , 90,	3.3	10
105	Operation of a ballistic heterojunction permeable base transistor. <i>IEEE Transactions on Electron Devices</i> , 1997 , 44, 1829-1836	2.9	10
104	Electronic Structures of Free-Standing Nanowires made from Indirect Bandgap Semiconductor Gallium Phosphide. <i>Scientific Reports</i> , 2016 , 6, 28240	4.9	10
103	Universal conductance fluctuations and phase-coherent transport in a semiconductor BiOSe nanoplate with strong spin-orbit interaction. <i>Nanoscale</i> , 2019 , 11, 10622-10628	7.7	9
102	Electronic structures of [001]- and [111]-oriented InSb and GaSb free-standing nanowires. <i>Journal of Applied Physics</i> , 2015 , 118, 094308	2.5	9
101	Gate-defined double quantum dot with integrated charge sensors realized in InGaAs/InP by incorporating a high- ϵ dielectric. <i>Applied Physics Letters</i> , 2010 , 96, 162107	3.4	9
100	A quantum dot ratchet: Experiment and theory. <i>Europhysics Letters</i> , 1999 , 45, 406-406	1.6	9
99	Gate tunable nonlinear rectification effects in three-terminal graphene nanojunctions. <i>Nanoscale</i> , 2014 , 6, 4527-31	7.7	8
98	g-factor and exchange energy in a few-electron lateral InGaAs quantum dot. <i>Applied Physics Letters</i> , 2009 , 95, 192112	3.4	8
97	Surface-enhanced Raman scattering on dual-layer metallic grating structures. <i>Science Bulletin</i> , 2010 , 55, 2643-2648		8
96	Phase property of the transmission through a quantum dot. <i>Journal of Physics Condensed Matter</i> , 2001 , 13, 3599-3606	1.8	8
95	Coulomb blockade from the shell of an InP-InAs core-shell nanowire with a triangular cross section. <i>Applied Physics Letters</i> , 2019 , 114, 053108	3.4	7
94	Revealing misfit dislocations in InAs P-InP core-shell nanowires by x-ray diffraction. <i>Nanotechnology</i> , 2019 , 30, 505703	3.4	7
93	Charge state readout and hyperfine interaction in a few-electron InGaAs double quantum dot. <i>Physical Review B</i> , 2011 , 83,	3.3	7
92	Spin filtering through magnetic-field-modulated double quantum dot structures. <i>Physical Review B</i> , 2006 , 73,	3.3	7

91	Spin transport and spin Hall effect in an electron waveguide in the presence of an in-plane magnetic field and spin-orbit interaction. <i>Physical Review B</i> , 2007 , 75,	3-3	7
90	A novel device principle for nanoelectronics. <i>Materials Science and Engineering C</i> , 2002 , 19, 417-420	8-3	7
89	Transport through single-channel atomic wires: Effects of connected sites on scattering phase and odd-even parity oscillations. <i>Physical Review B</i> , 2005 , 72,	3-3	7
88	Band-inverted gaps in InAs/GaSb and GaSb/InAs core-shell nanowires. <i>Scientific Reports</i> , 2016 , 6, 38698	4-9	7
87	Coexistence of induced superconductivity and quantum Hall states in InSb nanosheets. <i>Physical Review B</i> , 2019 , 99,	3-3	6
86	Synthesis of indium nanostructure-laces by multi-step Glancing Angle Deposition. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014 , 60, 70-74	3	6
85	Majorana fermions in topological-insulator nanowires: From single superconducting nanowires to Josephson junctions. <i>Physical Review B</i> , 2017 , 95,	3-3	6
84	A sequential logic device realized by integration of in-plane gate transistors in InGaAs/InP. <i>Applied Physics Letters</i> , 2008 , 92, 012116	3-4	6
83	Transport properties of proton-irradiated GaAs/AlGaAs two-dimensional electron gas structures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000 , 160, 33-37	1-2	6
82	Voltage and temperature limits for the operation of a quantum dot ratchet. <i>Physica B: Condensed Matter</i> , 1999 , 272, 61-63	2-8	6
81	Observation and Ultrafast Dynamics of Inter-Sub-Band Transition in InAs Twinning Superlattice Nanowires. <i>Advanced Materials</i> , 2020 , 32, e2004120	24	6
80	Electronic structures of [1 1 1]-oriented free-standing InAs and InP nanowires. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 135303	1-8	6
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