

Ki Wook Kim

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

211
papers

6,586
citations

43
h-index

74
g-index

237
ext. papers

7,120
ext. citations

3.1
avg, IF

5.69
L-index

#	Paper	IF	Citations
211	Scalable Characterization of 2D Gallium-Intercalated Epitaxial Graphene. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 55428-55439	9.5	1
210	First-principles analysis of magnetically doped transition-metal dichalcogenides. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 025002	3	1
209	Modeling of Antiferromagnetic Dynamics: A Brief Review. <i>IEEE Nanotechnology Magazine</i> , 2020 , 14, 32-41.7		0
208	Spin wave generation via localized spin-orbit torque in an antiferromagnet-topological insulator heterostructure. <i>Journal of Applied Physics</i> , 2020 , 128, 043901	2.5	
207	Nanoscale ballistic diodes made of polar materials for amplification and generation of radiation in the 10 THz-range. <i>Journal of Applied Physics</i> , 2019 , 126, 085708	2.5	1
206	Electrical generation and propagation of spin waves in antiferromagnetic thin-film nanostrips. <i>Applied Physics Letters</i> , 2019 , 114, 232403	3.4	1
205	Thermal fluctuations in antiferromagnetic nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2019 , 489, 165457	2.8	2
204	Controllable Dispersion of Domain-Wall Movement in Antiferromagnetic Thin Films at Finite Temperatures. <i>Physical Review Applied</i> , 2019 , 11,	4.3	1
203	Creation and Destruction of Skyrmions via Electrical Modulation of Local Magnetic Anisotropy in Magnetic Thin Films. <i>Physical Review Applied</i> , 2019 , 11,	4.3	3
202	Conductance nonreciprocity on the surface of a topological insulator with magnetic electrodes. <i>Journal of Physics and Chemistry of Solids</i> , 2019 , 128, 196-201	3.9	4
201	Voltage Control of Antiferromagnetic Phases at Near-Terahertz Frequencies. <i>Physical Review Applied</i> , 2018 , 9,	4.3	15
200	Toward enhanced thermoelectric effects in Bi ₂ Te ₃ /Sb ₂ Te ₃ heterostructures. <i>Semiconductor Science and Technology</i> , 2017 , 32, 035005	1.8	8
199	Electrical switching of antiferromagnets via strongly spin-orbit coupled materials. <i>Journal of Applied Physics</i> , 2017 , 121, 023907	2.5	11
198	Spin pumping torque in antiferromagnets. <i>Applied Physics Letters</i> , 2017 , 110, 192405	3.4	3
197	Currentless reversal of Néel vector in antiferromagnets. <i>Physical Review B</i> , 2017 , 95,	3.3	7
196	Helical waves in easy-plane antiferromagnets. <i>Physical Review B</i> , 2017 , 96,	3.3	2
195	Doping induced enhanced density of states in bismuth telluride. <i>Applied Physics Letters</i> , 2017 , 111, 232104		3

194	Bias-driven spontaneous spin-valley polarization in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2016 , 93,	3-3	5
193	Highly anisotropic electronic transport properties of monolayer and bilayer phosphorene from first principles. <i>Applied Physics Letters</i> , 2016 , 109, 053108	3-4	24
192	Atomistic modeling of phonon transport in turbostratic graphitic structures. <i>Journal of Applied Physics</i> , 2016 , 119, 204305	2-5	4
191	Equally efficient interlayer exciton relaxation and improved absorption in epitaxial and nonepitaxial MoS ₂ /WS ₂ heterostructures. <i>Nano Letters</i> , 2015 , 15, 486-91	11-5	282
190	Nonlinear magnetic dynamics in a nanomagnet/topological insulator heterostructure. <i>Physical Review B</i> , 2015 , 92,	3-3	9
189	Strain induced room temperature ferromagnetism in epitaxial magnesium oxide thin films. <i>Journal of Applied Physics</i> , 2015 , 118, 165309	2-5	7
188	Highly efficient conductance control in a topological insulator based magnetoelectric transistor. <i>Journal of Applied Physics</i> , 2015 , 118, 224502	2-5	1
187	Thin-film topological insulator-ferromagnet heterostructures for terahertz detection. <i>Applied Physics Letters</i> , 2014 , 104, 061116	3-4	9
186	Many-body effects in valleytronics: direct measurement of valley lifetimes in single-layer MoS ₂ . <i>Nano Letters</i> , 2014 , 14, 202-6	11-5	381
185	Spin Logic via Controlled Correlation in Nanomagnet/Dirac-Fermion Heterostructures. <i>Physical Review Applied</i> , 2014 , 2,	4-3	5
184	Exciton valley relaxation in a single layer of WS ₂ measured by ultrafast spectroscopy. <i>Physical Review B</i> , 2014 , 90,	3-3	102
183	Controlling electron propagation on a topological insulator surface via proximity interactions. <i>Physical Review B</i> , 2014 , 89,	3-3	12
182	Thermal transport properties of metal/MoS ₂ interfaces from first principles. <i>Journal of Applied Physics</i> , 2014 , 116, 034302	2-5	21
181	Voltage-driven magnetic bifurcations in nanomagnet/topological insulator heterostructures. <i>Physical Review B</i> , 2014 , 89,	3-3	22
180	Quasi-optical electron transport across a magnetically induced junction on a topological insulator surface. <i>Journal of Applied Physics</i> , 2014 , 116, 224301	2-5	1
179	Intrinsic transport properties of electrons and holes in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2014 , 90,	3-3	234
178	Hot-Electron Transistors for Terahertz Operation Based on Two-Dimensional Crystal Heterostructures. <i>Physical Review Applied</i> , 2014 , 2,	4-3	16
177	Intrinsic electrical transport properties of monolayer silicene and MoS ₂ from first principles. <i>Physical Review B</i> , 2013 , 87,	3-3	303

176	Spin logic via controlled correlation in a topological insulator-nanomagnet hybrid structure 2013 ,		2
175	Toward stimulated interaction of surface phonon polaritons. <i>Journal of Applied Physics</i> , 2013 , 114, 2335085		1
174	First-principles calculation of thermal transport in metal/graphene systems. <i>Physical Review B</i> , 2013 , 87,	3-3	46
173	Charge transfer equilibria in ambient-exposed epitaxial graphene on (0001) 6H-SiC. <i>Journal of Applied Physics</i> , 2012 , 111, 113706	2-5	32
172	Two dimensional crystal tunneling devices for THz operation. <i>Applied Physics Letters</i> , 2012 , 101, 263112	3-4	23
171	Tunable photogalvanic effect on topological insulator surfaces via proximity interactions. <i>Physical Review B</i> , 2012 , 86,	3-3	21
170	Multiple coexisting intercalation structures of sodium in epitaxial graphene-SiC interfaces. <i>Physical Review B</i> , 2012 , 85,	3-3	39
169	Magnetic domain wall transfer via graphene mediated electrostatic control. <i>Applied Physics Letters</i> , 2012 , 101, 013103	3-4	2
168	Electrically controlled magnetization in ferromagnet-topological insulator heterostructures. <i>Physical Review B</i> , 2012 , 86,	3-3	43
167	Phonon engineering in nanostructures: Controlling interfacial thermal resistance in multilayer-graphene/dielectric heterojunctions. <i>Applied Physics Letters</i> , 2012 , 101, 113111	3-4	45
166	Ab initio thermal transport properties of nanostructures from density functional perturbation theory. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 492204	1-8	16
165	Electron transport in bulk GaN under ultrashort high-electric field transient. <i>Semiconductor Science and Technology</i> , 2011 , 26, 105008	1-8	3
164	Electron-phonon interactions in bilayer graphene. <i>Physical Review B</i> , 2011 , 83,	3-3	37
163	Electron transport properties of bilayer graphene. <i>Physical Review B</i> , 2011 , 84,	3-3	24
162	Weak ferromagnetism of antiferromagnetic domains in graphene with defects. <i>Physical Review B</i> , 2011 , 84,	3-3	7
161	Strong substrate effects of Joule heating in graphene electronics. <i>Applied Physics Letters</i> , 2011 , 99, 233114	3-4	17
160	Electronic properties of the graphene/6H-SiC(0001) interface: A first-principles study. <i>Physical Review B</i> , 2011 , 84,	3-3	27
159	Unusual magnetoresistance in a topological insulator with a single ferromagnetic barrier. <i>Applied Physics Letters</i> , 2011 , 98, 243112	3-4	52

158	Generation-recombination noise in bipolar graphene. <i>Journal of Applied Physics</i> , 2011 , 110, 044327	2.5	5
157	Quasi-Coherent Thermal Emission in the Terahertz by Doped Semiconductors. <i>IEEE Sensors Journal</i> , 2010 , 10, 443-450	4	3
156	Graphene spin capacitor for magnetic field sensing. <i>Applied Physics Letters</i> , 2010 , 97, 013106	3.4	7
155	Surface polar phonon dominated electron transport in graphene. <i>Applied Physics Letters</i> , 2010 , 97, 232105	3.4	77
154	Band engineering and magnetic doping of epitaxial graphene on SiC (0001). <i>Physical Review Letters</i> , 2010 , 104, 146801	7.4	60
153	First-principles analysis of electron-phonon interactions in graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	164
152	Large-Signal Analysis of Terahertz Generation in Submicrometer GaN Diodes. <i>IEEE Sensors Journal</i> , 2010 , 10, 765-771	4	11
151	Thermoelectric properties of graphene nanoribbons, junctions and superlattices. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 372202	1.8	58
150	Electrically controlled magnetic switching based on graphene-magnet composite structures. <i>Journal of Applied Physics</i> , 2010 , 107, 064507	2.5	7
149	Magnetoconcentration effect in intrinsic graphene ribbons. <i>Applied Physics Letters</i> , 2010 , 97, 112112	3.4	2
148	Electron spin relaxation in carbon nanotubes. <i>Physical Review B</i> , 2010 , 82,	3.3	4
147	Influence of electron-electron scattering on transport characteristics in monolayer graphene. <i>Applied Physics Letters</i> , 2010 , 97, 082101	3.4	54
146	Alternate State Variables for Emerging Nanoelectronic Devices. <i>IEEE Nanotechnology Magazine</i> , 2009 , 8, 66-75	2.6	32
145	Terahertz generation in GaN diodes operating in pulsed regime limited by self-heating. <i>Applied Physics Letters</i> , 2009 , 94, 222106	3.4	7
144	First-principles analysis of lattice thermal conductivity in monolayer and bilayer graphene. <i>Physical Review B</i> , 2009 , 80,	3.3	151
143	Nonvolatile Memory via Spin Polaron Formation. <i>IEEE Nanotechnology Magazine</i> , 2008 , 7, 480-483	2.6	3
142	Electrical control of exchange bias mediated by graphene. <i>Physical Review Letters</i> , 2008 , 101, 147206	7.4	19
141	Electron spin relaxation via flexural phonon modes in semiconducting carbon nanotubes. <i>Physical Review B</i> , 2008 , 77,	3.3	10

140	Magnetic polaron for a spin memory application. <i>Journal of Applied Physics</i> , 2008 , 104, 084306	2.5	2
139	Magnetoresistance in bilayer graphene via ferromagnet proximity effects. <i>Physical Review B</i> , 2008 , 77,	3.3	24
138	Electrical Manipulation of Nonvolatile Spin Cell Based on Diluted Magnetic Semiconductor Quantum Dots. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 1032-1039	2.9	1
137	Elastic spin-relaxation processes in semiconductor quantum dots. <i>Physical Review B</i> , 2007 , 75,	3.3	25
136	Quasimonochromatic emission spectra in the near field by polar semiconductor thermal sources. <i>Applied Physics Letters</i> , 2007 , 90, 113106	3.4	3
135	Negative small-signal impedance of nanoscale GaN diodes in the terahertz frequency regime. <i>Applied Physics Letters</i> , 2007 , 90, 142117	3.4	6
134	Electron spin relaxation in semiconducting carbon nanotubes: The role of hyperfine interaction. <i>Physical Review B</i> , 2007 , 75,	3.3	13
133	Imaging properties of a metallic photonic crystal. <i>Journal of Applied Physics</i> , 2007 , 101, 113105	2.5	2
132	Spin field effect transistor with a graphene channel. <i>Applied Physics Letters</i> , 2007 , 91, 153105	3.4	150
131	. <i>IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems</i> , 2006 , 22, 12-21		37
130	Subpicosecond Raman studies of electric-field-induced optical phonon instability in an In _{0.53} Ga _{0.47} As-based semiconductor nanostructure. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, 7961-7974	1.8	5
129	Tunable waveguiding in electrically programmable VO ₂ -based photonic crystals. <i>Journal of Applied Physics</i> , 2006 , 99, 113106	2.5	8
128	Electron-phonon interaction via the Pekar mechanism in nanostructures. <i>Physical Review B</i> , 2005 , 71,	3.3	11
127	High-speed and high-frequency electron effects in nitride semiconductors for terahertz applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 2569-2572		2
126	Nitride-based two-terminal oscillators operating in the THz regime 2005 ,		1
125	Bistability in a magnetic and nonmagnetic double-quantum-well structure mediated by the magnetic phase transition. <i>Applied Physics Letters</i> , 2005 , 86, 073107	3.4	4
124	Prohibition of equilibrium spin currents in multiterminal ballistic devices. <i>Physical Review B</i> , 2005 , 71,	3.3	40
123	Nonvolatile bistability effect based on the electrically controlled phase transition in scaled magnetic semiconductor nanostructures. <i>Physical Review B</i> , 2005 , 72,	3.3	5

122	Terahertz generation in submicron GaN diodes within the limited space-charge accumulation regime. <i>Journal of Applied Physics</i> , 2005 , 98, 064507	2.5	34
121	Coulombic effects of electron-hole plasma in nitride-based nanostructures. <i>Journal of Applied Physics</i> , 2005 , 98, 063711	2.5	2
120	Spin relaxation of two-dimensional holes in strained asymmetric SiGe quantum wells. <i>Physical Review B</i> , 2005 , 71,	3.3	9
119	Phonon-mediated electron-spin phase diffusion in a quantum dot. <i>Physical Review Letters</i> , 2004 , 92, 026601	4.1	61
118	Resonance-like electrical control of electron spin for microwave measurement. <i>Applied Physics Letters</i> , 2004 , 85, 428-430	3.4	
117	Spin polaron and bistability in ferromagnetic semiconductor quantum structures. <i>Physical Review B</i> , 2004 , 70,	3.3	3
116	Tunable terahertz-frequency resonances and negative dynamic conductivity of two-dimensional electrons in group-III nitrides. <i>Journal of Applied Physics</i> , 2004 , 96, 6488-6491	2.5	28
115	Envelope-function analysis of wurtzite InGaN/GaN quantum well light emitting diodes. <i>Journal of Applied Physics</i> , 2004 , 96, 723-728	2.5	9
114	Low-field electron runaway and spontaneous formation of two-beam velocity distribution in polar semiconductors. <i>Physical Review B</i> , 2004 , 69,	3.3	2
113	Phase-plane analysis and classification of transient regimes for high-field electron transport in nitride semiconductors. <i>Journal of Applied Physics</i> , 2004 , 96, 6492-6503	2.5	9
112	High-frequency small-signal conductivity of hot electrons in nitride semiconductors. <i>Applied Physics Letters</i> , 2004 , 84, 3630-3632	3.4	11
111	Correlation of phonon decay with localized electron spin-phase diffusion. <i>Physical Review B</i> , 2004 , 70,	3.3	3
110	QUASI-BALLISTIC AND OVERSHOOT TRANSPORT IN GROUP III-NITRIDES. <i>International Journal of High Speed Electronics and Systems</i> , 2004 , 14, 127-154	0.5	2
109	Design of white light-emitting diodes using InGaN/AlInGaN quantum-well structures. <i>Applied Physics Letters</i> , 2004 , 84, 672-674	3.4	35
108	QUASI-BALLISTIC AND OVERSHOOT TRANSPORT IN GROUP III-NITRIDES. <i>Selected Topics in Electronics and Systems</i> , 2004 , 127-154	0	
107	Effect of an external magnetic field on electron-spin dephasing induced by hyperfine interaction in quantum dots. <i>Physical Review B</i> , 2003 , 67,	3.3	51
106	Spin-lattice relaxation in Si quantum dots. <i>Physical Review B</i> , 2003 , 68,	3.3	25
105	T-shaped spin filter with a ring resonator. <i>Journal of Applied Physics</i> , 2003 , 94, 4001-4005	2.5	92

104	Nonlinear regimes of coherent optical phonon generation in quantum wells under electric current pumping. <i>Physical Review B</i> , 2003 , 68,	3-3	3
103	Electron spin relaxation under drift in GaAs. <i>Applied Physics Letters</i> , 2003 , 82, 3686-3688	3-4	32
102	Observation of optical phonon instability induced by drifting electrons in semiconductor nanostructures. <i>Applied Physics Letters</i> , 2003 , 82, 1968-1970	3-4	14
101	Streaming distribution of two-dimensional electrons in III-N heterostructures for electrically pumped terahertz generation. <i>Applied Physics Letters</i> , 2003 , 82, 2643-2645	3-4	19
100	Manipulating the L-valley electron g factor in Si-Ge heterostructures. <i>Physical Review B</i> , 2003 , 68,	3-3	14
99	Hot electrons in group-III nitrides at moderate electric fields. <i>Applied Physics Letters</i> , 2002 , 80, 2317-2319,	3-4	21
98	Spin relaxation of conduction electrons in bulk III-V semiconductors. <i>Physical Review B</i> , 2002 , 66,	3-3	125
97	Designing a heterostructure for the quantum receiver. <i>Applied Physics Letters</i> , 2002 , 80, 2857-2859	3-4	7
96	Transmission of longitudinal optical phonons through a barrier in uniaxial crystals. <i>Physical Review B</i> , 2002 , 65,	3-3	8
95	Generation of high-frequency coherent acoustic phonons in superlattices under hopping transport. I. Linear theory of phonon instability. <i>Physical Review B</i> , 2002 , 65,	3-3	23
94	Laterally doped heterostructures for III-V lasing devices. <i>Applied Physics Letters</i> , 2002 , 81, 4616-4618	3-4	6
93	Generation of high-frequency coherent acoustic phonons in superlattices under hopping transport. II. Steady-state phonon population and electric current in generation regime. <i>Physical Review B</i> , 2002 , 65,	3-3	7
92	Spin-phase relaxation of two-dimensional holes localized in a fluctuating potential. <i>Physical Review B</i> , 2002 , 66,	3-3	8
91	HIGH-FIELD ELECTRON TRANSPORT CONTROLLED BY OPTICAL PHONON EMISSION IN NITRIDES. <i>International Journal of High Speed Electronics and Systems</i> , 2002 , 12, 1057-1081	0.5	3
90	Cerenkov generation of confined acoustic and optical phonons in quantum wells 2002 , 4643, 77		
89	Continuum model of optical phonons in a nanotube. <i>Superlattices and Microstructures</i> , 2001 , 29, 405-409,	2.8	26
88	Applicability of the Fermi golden rule and the possibility of low-field runaway transport in nitrides. <i>Journal of Physics Condensed Matter</i> , 2001 , 13, 6233-6246	1.8	10
87	Electron g factor engineering in III-V semiconductors for quantum communications. <i>Electronics Letters</i> , 2001 , 37, 464	1.1	86

86	Runaway effects in nanoscale group-III nitride semiconductor structures. <i>Physical Review B</i> , 2001 , 64,	3.3	7
85	In-plane light-hole g factor in strained cubic heterostructures. <i>Physical Review B</i> , 2001 , 64,	3.3	26
84	Quantized vibrational modes of nanospheres and nanotubes in the elastic continuum model. <i>Journal of Applied Physics</i> , 2001 , 89, 5107-5111	2.5	68
83	Amplification of transverse acoustic phonons in quantum well heterostructures with piezoelectric interaction. <i>Journal of Applied Physics</i> , 2001 , 90, 3934-3941	2.5	6
82	T-shaped ballistic spin filter. <i>Applied Physics Letters</i> , 2001 , 78, 775-777	3.4	147
81	Generation of coherent confined LO phonons under the drift of two-dimensional electrons. <i>Physical Review B</i> , 2001 , 63,	3.3	11
80	Scalable solid-state quantum computer based on quantum dot pillar structures. <i>Physical Review B</i> , 2000 , 61, 7526-7535	3.3	30
79	Thermal conductivity of Si/Ge superlattices: A realistic model with a diatomic unit cell. <i>Physical Review B</i> , 2000 , 62, 6896-6899	3.3	50
78	Cerenkov generation of high-frequency confined acoustic phonons in quantum wells. <i>Applied Physics Letters</i> , 2000 , 76, 1869-1871	3.4	17
77	NMR quantum computation with indirectly coupled gates. <i>Physical Review A</i> , 2000 , 62,	2.6	34
76	Progressive suppression of spin relaxation in two-dimensional channels of finite width. <i>Physical Review B</i> , 2000 , 61, 13115-13120	3.3	139
75	Energy-dependent electron scattering via interaction with optical phonons in wurtzite crystals and quantum wells. <i>Physical Review B</i> , 2000 , 61, 2034-2040	3.3	47
74	Generation and amplification of sub-THz coherent acoustic phonons under the drift of two-dimensional electrons. <i>Physical Review B</i> , 2000 , 62, 7459-7469	3.3	33
73	Coherent optical phonon generation by the electric current in quantum wells. <i>Applied Physics Letters</i> , 2000 , 77, 4178-4180	3.4	11
72	Quantum computing with complex instruction sets. <i>Physical Review A</i> , 1999 , 59, 1098-1101	2.6	18
71	Computing carrier interactions with confined and excluded phonons in nanostructures of complex geometries. <i>Physical Review B</i> , 1999 , 59, 10212-10216	3.3	5
70	Optically driven quantum-dot quantum computer. <i>Physical Review A</i> , 1999 , 60, 4146-4149	2.6	21
69	Zeeman Effect in Wurtzite-Based and Strained Cubic Heterostructures. <i>Physica Status Solidi (B): Basic Research</i> , 1999 , 215, 235-239	1.3	11

68	Dispersion of polar optical phonons in wurtzite quantum wells. <i>Physical Review B</i> , 1999 , 59, 5013-5020	3.3	147
67	Calculational approach for the structure of electron and hole levels in quantum dots of varying shape. <i>Physical Review B</i> , 1999 , 60, 7748-7751	3.3	5
66	Temperature dependence of impact ionization coefficients in p-Si. <i>Journal of Applied Physics</i> , 1998 , 83, 4988-4990	2.5	3
65	Long-wavelength optical phonons in ternary nitride-based crystals. <i>Physical Review B</i> , 1998 , 58, 15283-15287	3.3	63
64	Optical-phonon confinement and scattering in wurtzite heterostructures. <i>Physical Review B</i> , 1998 , 58, 4860-4865	3.3	140
63	Renormalization of acoustic phonon spectra and rudiments of the Peierls transition in free-standing quantum wires. <i>Physical Review B</i> , 1998 , 58, 16360-16368	3.3	8
62	OPTOELECTRONIC PROPERTIES OF STRAINED WURTZITE GaN QUANTUM-WELL LASERS. <i>International Journal of High Speed Electronics and Systems</i> , 1998 , 09, 1189-1209	0.5	
61	Electro-phonon resonance in cylindrical quantum wires. <i>Physical Review B</i> , 1998 , 58, 3580-3583	3.3	19
60	Deutsch-Jozsa algorithm as a test of quantum computation. <i>Physical Review A</i> , 1998 , 58, R1633-R1636	2.6	79
59	Phonon assisted intersubband transitions in step quantum well structures. <i>Journal of Applied Physics</i> , 1998 , 84, 2155-2164	2.5	40
58	RECENT DEVELOPMENTS ON ELECTRON-PHONON INTERACTIONS IN STRUCTURES FOR ELECTRONIC AND OPTOELECTRONIC DEVICES. <i>Selected Topics in Electronics and Systems</i> , 1998 , 281-312 ⁰		
57	Near-surface electrons and acoustic phonons: Energy and momentum relaxation. <i>Physical Review B</i> , 1997 , 56, 15770-15781	3.3	9
56	Carrier capture in pseudomorphically strained wurtzite GaN quantum-well lasers. <i>Applied Physics Letters</i> , 1997 , 71, 820-822	3.4	8
55	Strain effects on optical gain in wurtzite GaN. <i>Journal of Applied Physics</i> , 1997 , 82, 386-391	2.5	24
54	Transient ballistic transport in GaN. <i>Journal of Applied Physics</i> , 1997 , 81, 2901-2903	2.5	15
53	Hole scattering and optical transitions in wide-band-gap nitrides: Wurtzite and zinc-blende structures. <i>Physical Review B</i> , 1997 , 55, 4360-4375	3.3	40
52	Anisotropic hole scattering in hexagonal GaN. <i>Semiconductor Science and Technology</i> , 1997 , 12, 280-283	1.8	8
51	Electron-optical-phonon scattering in wurtzite crystals. <i>Physical Review B</i> , 1997 , 56, 997-1000	3.3	113

50	Transfer matrix method for interface optical-phonon modes in multiple-interface heterostructure systems. <i>Journal of Applied Physics</i> , 1997 , 82, 3363-3367	2.5	72
49	Electron interaction with confined acoustic phonons in cylindrical quantum wires via deformation potential. <i>Journal of Applied Physics</i> , 1996 , 80, 2815-2822	2.5	16
48	Strain effects on valence band structure in wurtzite GaN quantum wells. <i>Applied Physics Letters</i> , 1996 , 69, 2504-2506	3.4	30
47	Optical properties of ultrathin GaAs/AlAs quantum well structures with an electric field. <i>Journal of Applied Physics</i> , 1996 , 79, 8675-8681	2.5	2
46	Elastic vibrations of microtubules in a fluid. <i>Physical Review E</i> , 1996 , 53, 1003-1010	2.4	101
45	Envelope-function formalism for valence bands in wurtzite quantum wells. <i>Physical Review B</i> , 1996 , 53, 1997-2009	3.3	63
44	Dynamics of cytoskeletal filaments. <i>Physical Review E</i> , 1996 , 54, 1816-1823	2.4	12
43	Carrier capture in quantum well embedded quantum wire structures. <i>Applied Physics Letters</i> , 1996 , 69, 360-362	3.4	3
42	Tight-binding study of optical properties in short-period In _{0.53} Ga _{0.47} As/InP superlattices. <i>Physical Review B</i> , 1996 , 53, 6939-6942	3.3	1
41	Acoustic phonon quantization in buried waveguides and resonators. <i>Journal of Physics Condensed Matter</i> , 1996 , 8, 2143-2151	1.8	29
40	Carrier capture in cylindrical quantum wires. <i>Applied Physics Letters</i> , 1995 , 67, 3480-3482	3.4	7
39	Ballistic propagation of interface optical phonons. <i>Physical Review B</i> , 1995 , 51, 9863-9866	3.3	1
38	Theoretical study of electron transport in gallium nitride. <i>Journal of Applied Physics</i> , 1995 , 77, 2834-2836	2.5	85
37	Electron-acoustic-phonon scattering rates in cylindrical quantum wires. <i>Physical Review B</i> , 1995 , 51, 4695-4698	3.4	45
36	Application of near-ballistic transport in ultra-high-speed devices based on the potentials and limitations of a heterojunction launcher. <i>Semiconductor Science and Technology</i> , 1994 , 9, 824-827	1.8	
35	Phonon-assisted Gamma-X transition rates in type-II superlattices. <i>Physical Review B</i> , 1994 , 50, 2485-2493	3.3	1
34	A Monte Carlo study of hot electron injection and interface state generation model for silicon metal-oxide-semiconductor field-effect transistors. <i>Journal of Applied Physics</i> , 1994 , 75, 5087-5094	2.5	12
33	Theoretical calculation of longitudinal-optical-phonon lifetime in GaAs. <i>Journal of Applied Physics</i> , 1994 , 76, 3905-3907	2.5	42

32	Quantized acoustic phonon modes in quantum wires and quantum dots. <i>Journal of Applied Physics</i> , 1994 , 76, 4670-4675	2.5	69
31	Electron-acoustic-phonon scattering rates in rectangular quantum wires. <i>Physical Review B</i> , 1994 , 50, 1733-1738	3.3	81
30	Extension of the Kronig-Penney model for Γ X mixing in superlattices. <i>Journal of Applied Physics</i> , 1993 , 74, 4777-4779	2.5	4
29	Construction of higher-moment terms in the hydrodynamic electron-transport model. <i>Journal of Applied Physics</i> , 1993 , 74, 6197-6207	2.5	13
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26	Effects of band mixing on hole tunneling times in GaAs/AlAs double-barrier heterostructures. <i>Applied Physics Letters</i> , 1993 , 62, 1423-1425	3.4	7
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24	Novel charge injection transistors with heterojunction source (launcher) and drain (blocker) configurations. <i>Applied Physics Letters</i> , 1993 , 63, 174-176	3.4	10
23	Piezoelectric scattering of carriers from confined acoustic modes in cylindrical quantum wires. <i>Physical Review B</i> , 1993 , 48, 1936-1938	3.3	35
22	Simplified microscopic model for electron-optical-phonon interactions in quantum wells. <i>Physical Review B</i> , 1993 , 48, 14671-14674	3.3	21
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20	Electron intersubband scattering by confined and localized phonons in real quantum wires. <i>Journal of Physics Condensed Matter</i> , 1992 , 4, 4959-4970	1.8	32
19	Impact of k-space transfer and band nonparabolicity on electron transport in a GaAs ballistic diode. <i>Semiconductor Science and Technology</i> , 1992 , 7, B354-B356	1.8	5
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16	Confined phonon modes and hot-electron energy relaxation in semiconductor microstructures. <i>Semiconductor Science and Technology</i> , 1992 , 7, B60-B66	1.8	30
15	Dielectric response functions of heavily doped zincblende semiconductors with finite particle lifetime. <i>Journal of Applied Physics</i> , 1992 , 72, 4139-4147	2.5	9

14	Effects of doping variations on electron transport in GaAs n+-n-n+ structures. <i>Journal of Applied Physics</i> , 1992 , 72, 5695-5701	2.5	5
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8	An investigation of the effects of doping profile variations on AlGaAs/GaAs high electron mobility transistor performance. <i>Journal of Applied Physics</i> , 1991 , 70, 4593-4600	2.5	9
7	Transition from longitudinal-optical phonon scattering to surface-optical phonon scattering in polar semiconductor superlattices. <i>Applied Physics Letters</i> , 1991 , 59, 1093-1095	3.4	43
6	Influence of DX centers and surface states on doped high-electron-mobility transistor performance. <i>Journal of Applied Physics</i> , 1991 , 69, 4123-4128	2.5	2
5	Hydrodynamic electron-transport model: Nonparabolic corrections to the streaming terms. <i>Physical Review B</i> , 1991 , 44, 11119-11132	3.3	45
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1	Frequencies of confined longitudinal-optical phonon modes in GaAs/GaP short-period strained-layer superlattices. <i>Journal of Applied Physics</i> , 1990 , 67, 6179-6183	2.5	8