Chao Zhang

List of Publications by Year in Descending Order

253 papers	6,277 citations	32 h-index	75 g-index
300 ext. papers	7,248 ext. citations	3.4 avg, IF	5.64 L-index

#	Paper	IF	Citations
253	Optimizing topological switching in confined 2D-Xene nanoribbons via finite-size effects. *Applied Physics Reviews*, **2022**, 9, 011411	17.3	1
252	Temperature characteristic of carrier scattering and dark resistivity of semi-insulating GaAs. *Journal of Applied Physics*, **2021**, 130, 195107	2.5	1
251	Nonlinear effects in topological materials. *Frontiers of Optoelectronics*, **2021**, 14, 99-109	2.8	0
250	. *IEEE Transactions on Electron Devices*, **2021**, 68, 2189-2195	2.9	2
249	Observation of Negative Terahertz Photoconductivity in Large Area Type-II Dirac Semimetal PtTe_{2}. *Physical Review Letters*, **2021**, 126, 227402	7.4	8
248	Temperature-Dependent Terahertz Emission from Co/Mn2Au Spintronic Bilayers. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100290	2.5	2
247	Anisotropic thermionic response of Weyl semimetals with application in thermionic cooling. *Journal of Applied Physics*, **2020**, 128, 125101	2.5	1
246	Broadband strong optical dichroism in topological Dirac semimetals with Fermi velocity anisotropy. *Chinese Physics B*, **2020**, 29, 077802	1.2	3
245	Tunable strong photo-mixing in Weyl semimetals. *Physical Review B*, **2020**, 101,	3.3	4
244	Self-focusing in nodal semimetals. *Journal of the Optical Society of America B: Optical Physics*, **2020**, 37, 3581	1.7	
243	Effect of quantum reflection over the barrier on thermionic refrigeration. *Journal of Applied Physics* , **2020**, 128, 044301	2.5	2
242	Magnetic Modulation of Terahertz Waves via Spin-Polarized Electron Tunneling Based on Magnetic Tunnel Junctions. *Physical Review Applied*, **2020**, 14,	4.3	3
241	Ultrafast electron transport in metallic antiferromagnetic Mn2Au thin films probed by terahertz spectroscopy. *Physical Review B*, **2020**, 102,	3.3	2
240	Thermionic emission in nodal-ring semimetals. *Journal of Applied Physics*, **2020**, 128, 065108	2.5	3
239	Giant intrinsic circular dichroism of enantiomorphic flat Chern bands and flatband devices. *Physical Review B*, **2020**, 102,	3.3	5
238	Decrease in Terahertz Conductivity of Graphene Under Electron Beam Irradiations. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2019**, 40, 297-305	2.2	0
237	Superconducting pair-breaking under intense sub-gap terahertz radiation. *Applied Physics Letters*, **2019**, 114, 212601	3.4	

236	Ultrafast photocarrier dynamics in a 3D Dirac semimetal Cd3As2 film studied with terahertz spectroscopy. *Applied Physics Letters*, **2019**, 114, 221102	3.4	32
235	Magnetic-field-free terahertz emission from a magnetic tunneling junction. *Japanese Journal of Applied Physics*, **2019**, 58, 090913	1.4	7
234	Nonlinear optical response of the □3 model due to the nontrivial topology of the band dispersion. *Physical Review B*, **2019**, 100,	3.3	10
233	Thermal characteristic of dark resistivity of InGaAs photoconductive semiconductor switches. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 15339-15344	2.1	1
232	Low frequency transverse electric surface plasmon polaritons in a dielectric□graphene□dielectric structure. *Applied Physics Express*, **2019**, 12, 082009	2.4	3
231	Asymmetric tunneling properties in a 2D anisotropic massless linear energy system. *Applied Physics Express*, **2019**, 12, 125004	2.4	1
230	Nonlinear terahertz emission in the three-dimensional topological insulator Bi2Te3 by terahertz emission spectroscopy. *Applied Physics Letters*, **2019**, 115, 191102	3.4	19
229	Thermionic enhanced heat transfer in electronic devices based on 3D Dirac materials. *Journal of Applied Physics*, **2019**, 126, 165105	2.5	3
228	Strong tunable photomixing in semi-Dirac materials in the terahertz regime. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 200	1.7	3
227	Modulation of terahertz radiation from graphene surface plasmon polaritons via surface acoustic wave. *Optics Express*, **2019**, 27, 11137-11151	3.3	3
226	Direction controllable inverse transition radiation from the spatial dispersion in a graphene-dielectric stack. *Photonics Research*, **2019**, 7, 1154	6	9
225	Dynamical polarization in a graphene-topological-insulator heterostructure. *Materials Research Express*, **2019**, 6, 045603	1.7	
224	True spin and pseudo spin entanglement around Dirac Points in graphene with Rashba spin□orbit interaction. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2019**, 383, 295-300	2.3	
223	Accurate magneto-optical determination of radius of topological nodal-ring semimetals. *Physical Review B*, **2019**, 99,	3.3	7
222	Nonlinear optical response of a two-dimensional semi-Dirac system in the terahertz regime. *Journal of Physics Condensed Matter*, **2019**, 31, 135703	1.8	3
221	Nonlinear optical conductivity of Weyl semimetals in the terahertz regime. *Physica B: Condensed Matter*, **2019**, 555, 81-84	2.8	3
220	Broadband photocarrier dynamics and nonlinear absorption of PLD-grown WTe2 semimetal films. *Applied Physics Letters*, **2018**, 112, 171112	3.4	25
219	Frequency and orientation dependent conductivity of a semi-Dirac system. *Journal Physics D: Applied Physics*, **2018**, 51, 205302	3	3

218	Effect of the hexagonal warping on the dynamical conductivity of surface states in a topological insulator. *European Physical Journal B*, **2018**, 91, 1	1.2	1
217	Dependence of the optical conductivity on the uniaxial and biaxial strains in black phosphorene. *Physical Review B*, **2018**, 97,	3.3	17
216	Effects of surface nanostructuring and impurity doping on ultrafast carrier dynamics of silicon photovoltaic cells: a pump-probe study. *Journal Physics D: Applied Physics*, **2018**, 51, 024004	3	0
215	Hot carrier relaxation in three dimensional gapped Dirac semi-metals. *Journal Physics D: Applied Physics*, **2018**, 51, 015101	3	6
214	Realization of flat band with possible nontrivial topology in electronic Kagome lattice. *Science Advances*, **2018**, 4, eaau4511	14.3	62
213	Transverse conductance in a three-dimensional Weyl semimetal and Weyl superconductor hybrid under a strong magnetic field. *Physical Review B*, **2018**, 98,	3.3	3
212	A robust and tuneable mid-infrared optical switch enabled by bulk Dirac fermions. *Nature Communications*, **2017**, 8, 14111	17.4	126
211	Cherenkov terahertz radiation from graphene surface plasmon polaritons excited by an electron beam. *Applied Physics Letters*, **2017**, 110, 231102	3.4	30
210	Broadband hot-carrier dynamics in three-dimensional Dirac semimetal Cd3As2. *Applied Physics Letters*, **2017**, 111, 091101	3.4	32
209	Optical conductivity of a commensurate graphene-topological insulator heterostructure. *Journal Physics D: Applied Physics*, **2017**, 50, 385301	3	4
208	Nonlinear optical conductivity resulting from the local energy spectrum at the M point in graphene. *Physical Review B*, **2017**, 96,	3.3	7
207	Valleytronics in merging Dirac cones: All-electric-controlled valley filter, valve, and universal reversible logic gate. *Physical Review B*, **2017**, 96,	3.3	62
206	High efficiency and non-Richardson thermionics in three dimensional Dirac materials. *Applied Physics Letters*, **2017**, 111, 183902	3.4	13
205	Enhanced and one-way absorptance of LiNiO2 thin films in one-dimensional photonic crystals. *Journal of Applied Physics*, **2017**, 122, 243104	2.5	1
204	The tuned absorptance in multilayer graphene-dielectric structures by intraband transition. *Journal of Applied Physics*, **2017**, 122, 133109	2.5	6
203	Plasmon modes of circular cylindrical double-layer graphene. *Optics Express*, **2016**, 24, 20461-71	3.3	12
202	Efficient Excitation of Multiple Plasmonic Modes on Three-Dimensional Graphene: An Unexplored Dimension. *ACS Photonics*, **2016**, 3, 1986-1992	6.3	34
201	Nonlocal transistor based on pure crossed Andreev reflection in a EuO-graphene/superconductor hybrid structure. *Physical Review B*, **2016**, 93,	3.3	25

200	Charge Neutral Fermionic States and Current Oscillation in a Graphene□Superconductor Hybrid Structure. *Journal of the Physical Society of Japan*, **2016**, 85, 104713	1.5	1
199	Quantum ratchet in two-dimensional semiconductors with Rashba spin-orbit interaction. *Scientific Reports*, **2015**, 5, 7872	4.9	5
198	TOPOLOGICAL MATTER. Discovery of a Weyl fermion semimetal and topological Fermi arcs. *Science* , **2015**, 349, 613-7	33.3	2165
197	Nonlinear optical conductivity of bilayer graphene with Rashba spin-orbit interaction in the terahertz regime. *Journal of Applied Physics*, **2015**, 118, 043106	2.5	2
196	Single molecular shuttle-junction: Shot noise and decoherence. *Frontiers of Physics*, **2015**, 10, 59-86	3.7	9
195	Nonlinear optical response of graphene in terahertz and near-infrared frequency regime. *Frontiers of Optoelectronics*, **2015**, 8, 3-26	2.8	18
194	Coherent and Tunable Terahertz Radiation from Graphene Surface Plasmon Polarirons Excited by Cyclotron Electron Beam. *Scientific Reports*, **2015**, 5, 16059	4.9	24
193	Nonlinear terahertz response of HgTe/CdTe quantum wells. *Applied Physics Letters*, **2015**, 107, 081111	3.4	4
192	Optical bistability induced by nonlinear surface plasmon polaritons in graphene in terahertz regime. *Applied Physics Letters*, **2015**, 107, 203113	3.4	23
191	Transformation of surface plasmon polaritons to radiation in graphene in terahertz regime. *Applied Physics Letters*, **2015**, 106, 223107	3.4	26
190	Nonlinear optical conductivity of two-dimensional semiconductors with Rashba spin-orbit coupling in terahertz regime. *European Physical Journal B*, **2014**, 87, 1	1.2	6
189	Chiral-like tunneling of electrons in two-dimensional semiconductors with Rashba spin-orbit coupling. *Scientific Reports*, **2014**, 4, 3780	4.9	3
188	Dynamic conductivity of the bulk states of n-type HgTe/CdTe quantum well topological insulator. *Applied Physics Letters*, **2014**, 105, 202110	3.4	4
187	Topologically guaranteed enhancement of nonlinear optical conductivity of graphene in the presence of spin-orbit coupling. *Physical Review B*, **2014**, 90,	3.3	6
186	Resonant electronic transport through a triple quantum-dot with □type level structure under dual radiation fields. *Journal of Applied Physics*, **2014**, 116, 063702	2.5	1
185	Coherent and tunable terahertz radiation from graphene surface plasmon polaritons excited by an electron beam. *Applied Physics Letters*, **2014**, 104, 201104	3.4	90
184	Step-like multi-photon absorption in two-dimensional semiconductors with Rashba spin-orbit coupling in terahertz regime **2014**,		2
183	Universal geometric classification of armchair honeycomb nanoribbons by their properties in a staggered sublattice potential. *Applied Physics Letters*, **2013**, 103, 171608	3.4	

182	Klein tunneling and cone transport in AA-stacked bilayer graphene. *Physical Review B*, **2013**, 88,	3.3	24
181	Energy-loss rate of a fast particle in two-dimensional semiconductors with Rashba spin-orbit coupling. *Applied Physics Letters*, **2013**, 102, 052113	3.4	1
180	Difference between far-infrared photoconductivity spectroscopy and absorption spectroscopy: theoretical evidence of the electron reservoir mechanism. *Physical Review Letters*, **2013**, 111, 086801	7.4	2
179	Electromagnetically induced transparency of charge pumping in a triple-quantum-dots with Etype level structure. *Applied Physics Letters*, **2013**, 102, 163116	3.4	9
178	Energy loss rate of a charged particle in HgTe/(HgTe, CdTe) quantum wells. *Applied Physics Letters*, **2013**, 103, 192107	3.4	3
177	Theory of the integer quantum Hall effect in graphene. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2012**, 376, 616-619	2.3	8
176	Crystal structure, electronic structure and thermoelectric properties of n-type BiSbSTe2. *Journal Physics D: Applied Physics*, **2012**, 45, 125301	3	8
175	Enhanced optical conductance in graphene superlattice due to anisotropic band dispersion. *Journal Physics D: Applied Physics*, **2012**, 45, 395303	3	13
174	Electrical and thermoelectric properties of single-wall carbon nanotube doped Bi2Te3. *Applied Physics Letters*, **2012**, 101, 031909	3.4	41
173	Photomixing in topological insulator HgTe/CdTe quantum wells in terahertz regime. *Applied Physics Letters*, **2012**, 101, 211109	3.4	11
172	Retro reflection of electrons at the interface of bilayer graphene and superconductor. *Scientific Reports*, **2012**, 2, 1013	4.9	10
171	Room temperature giant and linear magnetoresistance in topological insulator Bi2Te3 nanosheets. *Physical Review Letters*, **2012**, 108, 266806	7.4	201
170	The effect of spin-orbit interaction on optical conductivity in graphene. *Journal of Physics Condensed Matter*, **2012**, 24, 035303	1.8	9
169	Terahertz Photon Mixing Effect in Gapped Graphene. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2012**, 33, 816-824	2.2	5
168	Room-temperature strong terahertz photon mixing in graphene. *Journal of the Optical Society of America B: Optical Physics*, **2012**, 29, 274	1.7	36
167	Specular Andreev reflection in the interface of a two-dimensional semiconductor with Rashba spin-orbit coupling and a d-wave superconductor. *Physical Review Letters*, **2012**, 108, 077002	7.4	23
166	OPTICAL CONDUCTANCE OF A TWO-DIMENSIONAL SEMICONDUCTOR IN THE PRESENCE OF RASHBA SPIN-ORBIT COUPLING AND A PERIODIC POTENTIAL. *Modern Physics Letters B*, **2012**, 26, 1250174	0.6	
165	Double trigonal warping and the anomalous quantum Hall step in bilayer graphene with Rashba spin-orbit coupling. *Journal of Physics Condensed Matter*, **2012**, 24, 485303	1.8	1

164	Strong Nonlinear Optical Response of Bilayer Graphene in the Terahertz Regime. *Key Engineering Materials*, **2012**, 500, 62-65	0.4	
163	Energy-loss rate of a fast particle in graphene. *Applied Physics Letters*, **2011**, 99, 053111	3.4	1
162	Two-color terahertz response in bilayer graphene nanoribbons with spin-orbit coupling. *Applied Physics Letters*, **2011**, 98, 061107	3.4	8
161	Transverse current response in armchair graphene ribbons. *Journal of Applied Physics*, **2011**, 110, 034313	2.5	2
160	Nonlinear transverse current response in zigzag graphene nanoribbons. *Journal of Applied Physics*, **2011**, 110, 073713	2.5	1
159	Subgap optical conductivity in semihydrogenated graphene. *Applied Physics Letters*, **2011**, 98, 042107	3.4	19
158	Electron tunneling in single layer graphene with an energy gap. *Chinese Physics B*, **2011**, 20, 027201	1.2	16
157	Gapless insulator and a band gap scaling law in semihydrogenated graphene. *Applied Physics Letters* , **2010**, 97, 043104	3.4	6
156	Dynamic conductivity of graphene with electron-LO-phonon interaction. *Physical Review B*, **2010**, 81,	3.3	43
155	The resonant tunneling through a graphene multiquantum well system. *Journal of Applied Physics*, **2010**, 107, 123718	2.5	16
154	Zero-gap materials for future spintronics, electronics and optics. *NPG Asia Materials*, **2010**, 2, 31-38	10.3	145
153	Nonlinear optical conductance in a graphene pn junction in the terahertz regime. *Applied Physics Letters*, **2010**, 97, 011907	3.4	31
152	Vertical absorption edge and temperature dependent resistivity in semihydrogenated graphene. *Applied Physics Letters*, **2010**, 96, 023107	3.4	9
151	Nonlinear optical spectrum of bilayer graphene in the terahertz regime. *Applied Physics Letters*, **2010**, 97, 243110	3.4	59
150	Electronic structure and thermoelectric properties of Bi2Te3 crystals and graphene-doped Bi2Te3. *Thin Solid Films*, **2010**, 518, e57-e60	2.2	33
149	Enhanced optical conductivity of bilayer graphene nanoribbons in the terahertz regime. *Physical Review Letters*, **2009**, 103, 207401	7.4	113
148	Noise temperature spectrum of hot electrons in semiconductor superlattices. *Journal of Applied Physics*, **2009**, 105, 013717	2.5	
147	Stretching induced Hall current and conductance anisotropy in graphene. *Applied Physics Letters*, **2009**, 95, 163104	3.4	5

146	Efficiency in nanometre gap vacuum thermionic refrigerators. *Journal Physics D: Applied Physics*, **2009**, 42, 035417	3	24
145	The effect of next nearest neighbor coupling on the optical spectra in bilayer graphene. *Nanotechnology*, **2009**, 20, 405203	3.4	20
144	Colossal Electroresistance and Giant Magnetoresistance in Doped PbPdO2 Thin Films. *Advanced Materials*, **2009**, 21, 2196-2199	24	91
143	Electrochemical performance of □Fe2O3 nanorods as anode material for lithium-ion cells. *Electrochimica Acta*, **2009**, 54, 1733-1736	6.7	208
142	Nanopumping molecules via a carbon nanotube. *Nano Research*, **2009**, 2, 938-944	10	22
141	Terahertz band-gap in InAs/GaSb type-II superlattices. *Microelectronics Journal*, **2009**, 40, 812-814	1.8	7
140	Thermodynamic properties of graphene nanoribbons under zero and quantizing magnetic fields. *Microelectronics Journal*, **2009**, 40, 716-718	1.8	9
139	The spin□orbit interaction enhanced terahertz absorption in graphene around the K point. *Microelectronics Journal*, **2009**, 40, 857-859	1.8	7
138	Mid-infrared absorption by short-period InAs/GaSb type II superlattices. *Microelectronics Journal*, **2009**, 40, 815-817	1.8	
137	Exchange-induced band hybridization in InAs/GaSb based type II and broken-gap quantum well systems. *Microelectronics Journal*, **2009**, 40, 809-811	1.8	
136	Strong nonlinear optical response of graphene in the terahertz regime. *Applied Physics Letters*, **2009**, 95, 072101	3.4	183
135	Orientation dependence of the optical spectra in graphene at high frequencies. *Physical Review B*, **2008**, 77,	3.3	67
134	Strong terahertz conductance of graphene nanoribbons under a magnetic field. *Applied Physics Letters*, **2008**, 93, 041106	3.4	68
133	Strong photon-mixing of terahertz waves in semiconductor quantum wells induced by Rashba spin-orbit coupling. *Nanotechnology*, **2008**, 19, 465401	3.4	5
132	Temperature dependence of the intrinsic spin Hall effect in Rashba spin-orbit coupled systems. *Europhysics Letters*, **2008**, 82, 67003	1.6	6
131	A unified geometric rule for designing nanomagnetism in graphene. *Nano Research*, **2008**, 1, 497-501	10	70
130	Two-colour infrared absorption in InAs/GaSb-based type II and broken-gap quantum well systems. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1069-1071	3	2
129	Broadband optical absorption in a two-dimensional electron gas in the presence of spin□orbit interaction and high magnetic fields. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1896-1898	3	

128	Exchange-enhanced spin splitting in a two-dimensional electron gas in the presence of spin–orbit interaction and magnetic fields. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1979-1981	3	1
127	Thermodynamic properties of two-dimensional semiconductors with spin–orbit coupling. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1454-1456	3	3
126	Electronic subband structure of InAs/GaSb-based type II and broken-gap quantum well systems. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1536-1538	3	
125	Photo absorption in spintronic multilayer systems. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2138-2140	3	
124	Thermionic refrigeration in low-dimensional structures. *Microelectronics Journal*, **2008**, 39, 597-600	1.8	6
123	Electronic and thermal transport in hot carrier solar cells with low-dimensional contacts. *Microelectronics Journal*, **2008**, 39, 656-659	1.8	29
122	Orbital magnetization of graphene and graphene nanoribbons. *Journal of Applied Physics*, **2008**, 103, 103711	2.5	33
121	Gate-tunable Ruderman-Kittel-Kasuya-Yosida interaction mediated by low-dimensional electrons with Rashba spin-orbit coupling. *Journal of Applied Physics*, **2007**, 102, 103910	2.5	20
120	Photocurrent induced by intersubband transition in a type II and broken-gap quantum well system. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 544-546		
119	Light scattering in an electron-hole double quantum well in the presence of spin-orbit interaction. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 445-447		
118	Negative long wavelength dielectric constant in semiconductor QWs. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 451-453		
117	Spin Josephson effect in spintronic nanostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 478-480		
116	Nonlinear optical properties of semiconductor quantum wells under intense terahertz radiation. *Applied Physics Letters*, **2007**, 91, 041909	3.4	9
115	Photon absorption and collective excitations in spintronic superlattices. *Journal of Materials Science: Materials in Electronics*, **2007**, 18, 87-91	2.1	1
114	Impurity mediated absorption continuum in single-walled carbon nanotubes. *Applied Physics Letters* , **2007**, 90, 023106	3.4	7
113	Enhancement of polarization in a spin-orbit coupling quantum wire with a constriction. *Physical Review B*, **2007**, 76,	3.3	29
112	Spin-orbit interaction enhanced polaron effect in two-dimensional semiconductors. *Applied Physics Letters*, **2007**, 90, 112103	3.4	21
111	Phonon-limited mobility in two-dimensional semiconductors with spin-orbit coupling. *Applied Physics Letters*, **2007**, 91, 102115	3.4	12

110	Thermionic refrigerators with non-Richardson current. *Journal Physics D: Applied Physics*, **2007**, 40, 1167-1174	3	22
109	Magnetic-field-induced charge current in quantum wells with spin–orbit coupling. *Nanotechnology*, **2007**, 18, 475403	3.4	2
108	Low thermal conductivity short-period superlattice thermionic devices. *Journal Physics D: Applied Physics*, **2006**, 39, 4153-4158	3	11
107	Shot noise and conductance in metallic carbon nanotubes in the presence of correlated defects. *Physical Review B*, **2006**, 73,	3.3	8
106	Thermionic cooling in cylindrical semiconductor nanostructures. *Applied Physics Letters*, **2006**, 89, 153125	3.4	4
105	Optical spectrum of a two-dimensional hole gas in the presence of spin-orbit interaction. *Physical Review B*, **2006**, 74,	3.3	14
104	Transport of spin-polarized electrons in a magnetic superlattice. *Physical Review B*, **2006**, 73,	3.3	54
103	Pressure-induced transition in magnetoresistance of single-walled carbon nanotubes. *Physical Review Letters*, **2006**, 97, 026402	7.4	32
102	Two color plasmon excitation in an electron-hole bilayer structure controlled by the spin-orbit interaction. *Applied Physics Letters*, **2006**, 88, 223102	3.4	11
101	Optical absorption coefficients in two-dimensional semiconductors under strong magnetic field. *Journal of Applied Physics*, **2006**, 99, 123706	2.5	3
100	Fiber-optic temperature sensor based on interference of selective higher-order modes. *Applied Physics Letters*, **2006**, 89, 091119	3.4	163
99	Exchange-enhanced spin-splitting in a two-dimensional electron gas in the presence of the Rashba spin–orbit interaction. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 32, 363-366	3	1
98	Fast-electron optical spectrum of a two-dimensional electron gas in the presence of the Rashba effect. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 34, 272-275	3	2
97	Frequency-dependent Hall effect in spintronic systems under zero magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 34, 321-324	3	1
96	The effect of the electron energy spectrum on electronic efficiency and power in thermionic and thermoelectric devices **2005**,		2
95	Nonlinear response formula for an interacting two-dimensional electron gas under a magnetic field and microwave radiation. *Physical Review B*, **2005**, 71,	3.3	8
94	Electronic efficiency in nanostructured thermionic and thermoelectric devices. *Physical Review B*, **2005**, 72,	3.3	76
93	Principles of charge and heat transport in thermionic devices **2005**, 5649, 332		2

92	The effect of barrier shape on thermionic refrigerator performance **2005**,		1
91	A new magnetoplasmon sound wave in a two-dimensional electron gas under electromagnetic radiation. *Europhysics Letters*, **2005**, 69, 623-628	1.6	
90	Dynamic Hall resistivity of electronic systems in the presence of Rashba coupling at zero field. *Physical Review B*, **2005**, 71,	3.3	31
89	Effects of collective excitations on the quantum well intersubband absorption. *Journal of Applied Physics*, **2005**, 98, 103530	2.5	4
88	Calculation of the nonlinear free-carrier absorption of terahertz radiation in semiconductor heterostructures. *Physical Review B*, **2004**, 70,	3.3	6
87	Optical absorption in terahertz-driven quantum wells. *Journal of Applied Physics*, **2004**, 95, 1191-1195	2.5	19
86	Optical losses in dielectric apertured terahertz VCSEL. *Optics and Laser Technology*, **2004**, 36, 575-580	4.2	1
85	Dynamical conductivity of a two-dimensional electron gas under an intense terahertz radiation. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 17, 289-291	3	
84	Investigation into space charge effects in IV characteristics of multi-layer semiconductor thermionic devices. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 17, 651-653	3	3
83	Induced charge-density oscillation under a quantizing magnetic field and intense terahertz radiation. *Physical Review B*, **2003**, 67,	3.3	12
82	Dynamic screening and collective excitation of an electron gas under intense terahertz radiation. *Physical Review B*, **2002**, 65,	3.3	12
81	Frequency-dependent electrical transport under intense terahertz radiation. *Physical Review B*, **2002**, 66,	3.3	30
80	Electronic states and dielectric response of a two-dimensional electron gas in a strong magnetic field and an intense laser field. *Physica B: Condensed Matter*, **2001**, 298, 333-338	2.8	4
79	Dynamical Franz-Keldysh effect of an electron gas in high magnetic fields and intense laser fields. *Physica B: Condensed Matter*, **2001**, 298, 339-343	2.8	1
78	Numerical calculation of thermionic cooling efficiency in a double-barrier semiconductor heterostructure. *Physica E: Low-Dimensional Systems and Nanostructures*, **2001**, 11, 287-291	3	16
77	Electronic thermal transport and thermionic cooling in semiconductor multi-quantum-well structures. *Computer Physics Communications*, **2001**, 142, 274-280	4.2	3
76	Electronic states and dielectric response of an electron gas under a quantizing magnetic field and an intense laser. *Computer Physics Communications*, **2001**, 142, 374-381	4.2	1
75	Resonant tunneling and bistability in a double barrier structure under an intense terahertz laser. *Applied Physics Letters*, **2001**, 78, 4187-4189	3.4	33

74	The magnetoconductivity of a square lattice in a periodically modulated magnetic field. *Solid State Communications*, **2000**, 115, 163-166	1.6	5
73	Energy loss rate of a heavy particle in a magnetically quantized two-dimensional electron gas under intense laser radiation. *Solid State Communications*, **2000**, 116, 241-246	1.6	2
72	Asymmetry and rectification in the tunnel current of a nanometer-sized metal-conjugated polymer–metal junction. *Journal of Chemical Physics*, **2000**, 112, 6774-6778	3.9	7
71	Electronic subband structure in two-dimensional electron gases under intense laser radiations. *Physica E: Low-Dimensional Systems and Nanostructures*, **1998**, 2, 252-255	3	4
70	Terahertz absorption in a double quantum well system under a magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **1998**, 2, 799-803	3	
69	Photon assisted hypersonic phonon emission from terahertz-driven two-dimensional electron gases. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1998**, 51, 81-84	3.1	
68	Thermodynamic properties of a two-dimensional electron gas in the presence of a weak spatially modulated periodic potential. *Journal of Physics Condensed Matter*, **1998**, 10, 5545-5566	1.8	4
67	Generation of tunable hypersonic phonons from two-dimensional electron gases under free-electron laser radiations. *Europhysics Letters*, **1998**, 42, 191-196	1.6	2
66	Electromagnetic absorption in an electron - hole double-layer system in a magnetic field. *Journal of Physics Condensed Matter*, **1997**, 9, 8237-8248	1.8	
65	Absorption of electromagnetic waves in two-dimensional systems under a magnetic field and a periodic potential. *Journal of Physics Condensed Matter*, **1997**, 9, L641-L646	1.8	
64	Magnetotransport of a two-dimensional electronic system in a tilted magnetic field. *Semiconductor Science and Technology*, **1997**, 12, 835-839	1.8	3
63	Nonlinear transport in steady-state terahertz-driven two-dimensional electron gases. *Physical Review B*, **1997**, 55, 5259-5265	3.3	63
62	Light scattering from a periodically modulated two-dimensional electron gaswith partially filled Landau levels. *Physical Review B*, **1997**, 55, 15423-15426	3.3	1
61	The response function of a two-dimensional electron gas in a unidirectional spatially periodic magnetic modulation. *Journal of Physics Condensed Matter*, **1996**, 8, 6019-6033	1.8	6
60	Origin of current broadening in resonant tunneling via localised states. *Surface Science*, **1996**, 361-362, 231-234	1.8	4
59	Charge accumulation over a region of electrical multistability in a double barrier structure. *Surface Science*, **1996**, 361-362, 226-230	1.8	
58	Electron-hole pair excitation in a magneto-quantum plasma under a one-dimensional periodic potential. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1996**, 215, 86-90	2.3	1
57	High-frequency acoustic-phonon generation by heated electrons in parabolic-quantum-well wires in tilted magnetic fields. *Journal of Physics Condensed Matter*, **1996**, 8, 11111-11120	1.8	3

56	Magneto-photon-phonon resonances in two-dimensional semiconductor systems driven by terahertz electromagnetic fields. *Physical Review B*, **1996**, 54, 4907-4912	3.3	19
55	Tunneling spectroscopy of hole plasmons in a valence-band quantum well. *Physical Review B*, **1996**, 54, R11106-R11109	3.3	4
54	Resonant absorption of terahertz electromagnetic waves by heated electrons in AlGaAs/GaAs heterostructures. *Applied Physics Letters*, **1996**, 68, 3305-3307	3.4	25
53	Enhancement of terahertz acoustic-phonon generation by the magnetic field applied parallel to a two-dimensional semiconductor system. *Applied Physics Letters*, **1996**, 68, 823-825	3.4	11
52	Plasmon Satellites of Resonantly Tunnelling Holes **1996**, 535-537		
51	Response function of a two-dimensional electron gas in a unidirectional periodic potential. *Physical Review B*, **1995**, 52, 17036-17039	3.3	10
50	Magnetoplasmon emission versus Landau-level scattering in resonant tunneling through double-barrier structures. *Physical Review B*, **1995**, 52, 14775-14780	3.3	
49	Magnetoplasmons in modulated two-dimensional electronic systems. *Semiconductor Science and Technology*, **1995**, 10, 1541-1544	1.8	4
48	Temperature-dependent width of current tristability for resonant tunnelling through a double-barrier structure. *Journal of Physics Condensed Matter*, **1995**, 7, L331-L336	1.8	0
47	Exact formula for nondiagonal Green's functions in condensed-matter physics. *Physical Review B*, **1994**, 50, 18640-18643	3.3	6
46	Electron tunneling lifetime of a quasibound state in a double-barrier resonant tunneling structure. *Journal of Applied Physics*, **1994**, 76, 606-608	2.5	6
45	Theory for the oscillatory cyclotron resonance effective mass in a heterostructure. *Journal of Applied Physics*, **1994**, 75, 902-907	2.5	2
44	Plasmon assisted resonant tunneling in a double barrier heterostructure. *Physical Review Letters*, **1994**, 72, 3397-3400	7.4	33
43	Electron correlations in a double-quantum-well structure. *Physical Review B*, **1994**, 49, 2939-2942	3.3	15
42	Dynamical conductivity of a two-layered structure with electron-acoustic phonon coupling. *Journal of Physics Condensed Matter*, **1993**, 5, 5009-5018	1.8	21
41	Possible Negative Collisional Damping and Instability of a Drifting Two-Dimensional Quantum Plasma. *Europhysics Letters*, **1993**, 21, 351-356	1.6	
40	Hartree-Fock method posed as a density-functional theory: Application to the Be atom. *Physical Review A*, **1993**, 48, 2708-2715	2.6	37
39	Correlations and Local Field Corrections for a Two-Dimensional Electronic System in an External Magnetic Field. *Annals of Physics*, **1993**, 224, 193-209	2.5	7

38	Diffusion of objects in superconductors: crossover from classical to quantum behaviour on suppression of infrared couplings. *Journal of Physics Condensed Matter*, **1992**, 4, L549-L554	1.8	
37	Crystallinity, exchange-correlation and isotope effects on the plasmon excitations in high Tcsuperconductors. *Journal of Physics Condensed Matter*, **1992**, 4, 3533-3550	1.8	
36	The anomalous hop rate of localized particles in a marginal Fermi liquid. *Journal of Physics Condensed Matter*, **1992**, 4, L15-L19	1.8	3
35	Energy-loss rate of a particle in a marginal Fermi liquid. *Physical Review B*, **1992**, 46, 9247-9249	3.3	3
34	Effective mass of the 2-dimensional electron gas in an Al0.6Ga0.4Sb/InAs single quantum well. *Superlattices and Microstructures*, **1992**, 11, 423-427	2.8	1
33	Ward-Takahashi relation for a superlattice structure. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1992**, 166, 388-392	2.3	
32	Effects of electron correlations, dynamical screening and plasmon excitations on muon diffusion in metals. *Hyperfine Interactions*, **1991**, 64, 729-735	0.8	1
31	Hopping rate of charged particles in a superlattice. *Journal of Physics Condensed Matter*, **1991**, 3, 1429-1441	1.8	1
30	Effect of electron-phonon coupling on the hopping rate of charged particles in a superlattice. *Physical Review B*, **1991**, 43, 12522-12529	3.3	
29	Theory of hopping rate of localized charged particles in metals: Electron scattering. *Physical Review B*, **1991**, 43, 1463-1470	3.3	5
28	Theory of Bloch delocalization and quantum diffusion of heavy particles in insulators. *Physical Review Letters*, **1991**, 66, 1902-1905	7.4	28
27	Theory of the Raman-scattering intensity and line shape of a quantum-dot superlattice. *Physical Review B*, **1991**, 44, 10744-10748	3.3	2
26	Hopping rate of localized defects interacting with two-dimensional electron systems in a magnetic field. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1990**, 148, 193-198	2.3	3
25	Longitudinal field muon spin relaxation: a new probe of two-dimensional electron systems. *Journal of Physics Condensed Matter*, **1990**, 2, 9691-9695	1.8	
24	Comment on "Commensurability oscillations in magnetoplasmons of a density-modulated two-dimensional electron gas". *Physical Review Letters*, **1990**, 65, 2207	7.4	11
23	Comment on "Guiding-center-drift resonance in a periodically modulated two-dimensional electron gas". *Physical Review Letters*, **1990**, 64, 1473	7.4	31
22	Theory of magnetotransport in two-dimensional electron systems with unidirectional periodic modulation. *Physical Review B*, **1990**, 41, 12850-12861	3.3	116
21	Quantum magneto-transport theory for two-dimensional electron systems with unidirectional periodic modulation. *Surface Science*, **1990**, 229, 92-95	1.8	15

20	Density of states in a two-dimensional electron gas in the presence of a one-dimensional superlattice potential. *Physical Review B*, **1989**, 39, 13020-13023	3.3	67
19	Transmission spectroscopy on sawtooth-doping superlattices. *Physical Review B*, **1989**, 39, 3776-3779	3.3	9
18	Quantum-confined subband transitions of a GaAs sawtooth doping superlattice. *Applied Physics Letters*, **1989**, 54, 1133-1135	3.4	23
17	Theory of electromagnetic absorption in strongly correlated plasmas. *Physical Review A*, **1989**, 40, 1004-1016	2.6	
16	Quasiclassical behavior of ballistic electrons in a perpendicular magnetic field. *Physical Review B*, **1989**, 39, 12981-12984	3.3	7
15	Magnetotunneling measurement of space-charge accumulation in delta -doped quantum wells. *Physical Review B*, **1989**, 39, 1097-1103	3.3	1
14	Photoresponse in a sawtooth doping superlattice. *Physica Scripta*, **1989**, 39, 115-119	2.6	
13	Effect of dielectric anisotropy of quantum wells on reflection. *Superlattices and Microstructures*, **1989**, 5, 65-69	2.8	7
12	Infrared photocurrent in a short period sawtooth doping superlattice. *Superlattices and Microstructures*, **1989**, 5, 163-165	2.8	
11	Reply to "Comment on SDetermination of valence-band discontinuity via optical transitions in ultrathin quantum wellsS". *Physical Review B*, **1988**, 37, 1408-1410	3.3	1
10	Energy-loss rate of a positron in a metal. *Physical Review B*, **1988**, 37, 7326-7330	3.3	18
9	Tunable absorption in a ssV-shaped multiple-quantum-well structure. *Physical Review B*, **1988**, 38, 8336-8341	3.3	5
8	Electron correlations in quantum and classical plasmas in a layered structure. *Physical Review A*, **1988**, 38, 5786-5792	2.6	25
7	Photocurrent spectroscopy in a sawtooth doping superlattice. *Applied Physics Letters*, **1988**, 52, 1967-1969	3.4	8
6	Quantum interference in time-dependent tunneling. *Applied Physics Letters*, **1988**, 53, 1982-1984	3.4	1
5	High-frequency conductivity of superlattices with electron-phonon coupling. *Physical Review B*, **1987**, 35, 7596-7603	3.3	9
4	Effect of correlation on conductivity and relaxation time. *Physical Review B*, **1987**, 36, 7906-7918	3.3	4
3	Light scattering from a layered electron gas. *Physical Review B*, **1986**, 34, 1050-1056	3.3	30

2	High-frequency conductivity of type-II superlattices. *Physical Review B*, **1986**, 33, 2642-2652	3.3	9
1	High-frequency conductivity of type-I superlattices. *Physical Review B*, **1985**, 32, 1146-1151	3.3	30