

Guo-Qiang Hai

List of Publications by Year in descending order

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100
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1,464
citations

331538
21
h-index

360920
35
g-index

103
all docs

103
docs citations

103
times ranked

978
citing authors

#	ARTICLE	IF	CITATIONS
1	Colossal permittivity with ultralow dielectric loss in In + Ta co-doped rutile TiO_2 . Journal of Materials Chemistry A, 2017, 5, 5436-5441.	5.2	123
2	Polaron energy and effective mass in a quantum well. Physical Review B, 1990, 42, 11063-11072.	1.1	99
3	Donor transition energy in GaAs superlattices in a magnetic field along the growth axis. Physical Review B, 1991, 44, 5692-5702.	1.1	84
4	Electron optical-phonon coupling in GaAs/Al _x Ga _{1-x} As quantum wells due to interface, slab, and half-space modes. Physical Review B, 1993, 48, 4666-4674.	1.1	78
5	Multisubband electron transport in δ -doped semiconductor systems. Physical Review B, 1995, 52, 8363-8371.	1.1	61
6	Polaron-cyclotron-resonance spectrum resulting from interface- and slab-phonon modes in a GaAs/AlAs quantum well. Physical Review B, 1993, 47, 10358-10374.	1.1	54
7	Mobility of electrons in a quasi-one-dimensional conducting channel on the liquid-helium surface. Physical Review B, 1995, 51, 5977-5988.	1.1	50
8	Quantum Monte Carlo study of small aluminum clusters Al_n . Al_n $\text{ETQqO O O rgBT /Overlock 10 Tf 50 462 Td}$ Al_n $\text{ETQqO O O rgBT /Overlock 10 Tf 50 462 Td}$	1.1	44
9	Physical Review B, 2012, 85, . Continuous structural transitions in quasi-one-dimensional classical Wigner crystals. Physical Review B, 2010, 81, .	1.1	39
10	Intersubband coupling and screening effects on the electron transport in a quasi-two-dimensional δ -doped semiconductor system. Journal of Applied Physics, 1996, 80, 5809-5814.	1.1	38
11	Resonant Magnetopolaron Effects due to Interface Phonons in GaAs/AlGaAs Multiple Quantum Well Structures. Physical Review Letters, 1997, 79, 3226-3229.	2.9	38
12	Magnetopolaron effect in parabolic quantum wells in tilted magnetic fields. Physical Review B, 1999, 60, 8984-8991.	1.1	38
13	Screening of the electron-phonon interaction in quasi-one-dimensional semiconductor structures. Physical Review B, 1993, 48, 12016-12022.	1.1	37
14	Dc and ac transport in silicene. Journal of Physics Condensed Matter, 2014, 26, 345303.	0.7	36
15	Binding energies of small lithium clusters: A comparison of different theoretical calculations. Chemical Physics Letters, 2014, 616-617, 212-216.	1.2	34
16	Control of the persistent currents in two interacting quantum rings through the Coulomb interaction and interring tunneling. Physical Review B, 2008, 78, .	1.1	26
17	Artificial molecular quantum rings: Spin density functional theory calculations. Physical Review B, 2006, 74, .	1.1	25
18	Anharmonic effects on thermodynamic properties of a graphene monolayer. Europhysics Letters, 2014, 107, 56004.	0.7	24

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19	Quantum effects in a free-standing graphene lattice: Path-integral against classical Monte Carlo simulations. Physical Review B, 2015, 92, .	1.1	24
20	Polaron effect on D^+ centers in weakly polar semiconductors. Physical Review B, 1998, 57, 3900-3904.	1.1	23
21	Electron mobility in two coupled $\hat{\Gamma}$ layers. Physical Review B, 1995, 52, 11273-11276.	1.1	21
22	Optically detected magnetophonon resonances in GaAs. Physical Review B, 1999, 60, 16513-16518.	1.1	19
23	Plasmon modes and screening in double metallic armchair graphene nanoribbons. Physical Review B, 2013, 88, .	1.1	16
24	Correlation effects on aromaticity of cluster: A quantum Monte Carlo study. Chemical Physics Letters, 2013, 586, 108-110.	1.2	16
25	A quantum Monte Carlo study on electron correlation in all-metal aromatic clusters MA_4^{+} ($M = Li$), Tj ETQq1 1 0.784314 rgBT / Overlook 1.3	1.3	16
26	Phonon-assisted tunneling in coupled semiconductor quantum dots. Physical Review B, 2005, 71, .	1.1	15
27	Anomalous Rashba spin-orbit interaction in $InAs^{+}GaSb$ quantum wells. Applied Physics Letters, 2008, 92, 152107.	1.5	15
28	Quantum Monte Carlo study on the structures and energetics of cyclic and linear carbon clusters C_n ($n = 3-10$). Physical Review A, 2018, 98, .	1.3	15
29	Electron-acoustic-phonon scattering and electron relaxation in two-coupled quantum rings. Journal of Applied Physics, 2007, 101, 124308.	1.1	14
30	Spin- and valley-dependent commensurability oscillations and electric-field-induced quantum Hall plateaux in periodically modulated silicene. Applied Physics Letters, 2014, 104, 213109.	1.5	14
31	Phonon-induced electron relaxation in quantum rings. Physical Review B, 2007, 75, .	1.1	12
32	Inelastic Coulomb scattering rates due to acoustic and optical plasmon modes in coupled quantum wires. Physical Review B, 2000, 61, 7564-7570.	1.1	11
33	Electron pairing: from metastable electron pair to bipolaron. Journal of Physics Communications, 2018, 2, 035017.	0.5	11
34	Interband magneto-optical studies of resonant polaron coupling in $CdTe/Cd^{+}Mn_xTe$ quantum wells. Physical Review B, 1994, 50, 7596-7601.	1.1	10
35	Electron mobility in Si delta doped GaAs. Physica B: Condensed Matter, 1995, 211, 462-465.	1.3	10
36	Quantum Monte Carlo study of the electron binding energies and aromaticity of small neutral and charged boron clusters. Journal of Chemical Physics, 2018, 149, 214303.	1.2	10

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37	Plasmon-phonon coupling in $\tilde{\Gamma}$ -doped polar semiconductors. Physical Review B, 1997, 55, 1554-1562.	1.1	9
38	Bloch-Kohn and Wannier-Kohn functions in one dimension. Journal of Physics Condensed Matter, 2003, 15, 6701-6714.	0.7	9
39	Nonlinear transport of electrons in a quasi-one-dimensional channel on the liquid-helium surface. Physical Review B, 1995, 52, 15509-15516.	1.1	8
40	Anharmonic Quantum Effects in Cubic Boron Nitride Crystal by Path Integral Monte Carlo Simulations. Physica Status Solidi (B): Basic Research, 2019, 256, 1900164.	0.7	8
41	Topology Driven $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"} \rangle \langle \text{mml:mi} \rangle g \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Factor Tuning in Type-II Quantum Dots. Physical Review Applied, 2019, 11, .	1.5	8
42	Quantum effects on elastic constants of diamond by path-integral Monte Carlo simulations. Computational Materials Science, 2020, 173, 109387.	1.4	8
43	Tunneling-assisted acoustic-plasmon quasiparticle excitation resonances in coupled quasi-one-dimensional electron gases. Physical Review B, 2000, 61, 1704-1707.	1.1	7
44	Intrasubband and intersubband electron relaxation in semiconductor quantum wire structures. Physical Review B, 2001, 63, .	1.1	7
45	Thermodynamic properties of solid molecular hydrogen by path integral Monte Carlo simulations. Chemical Physics Letters, 2018, 691, 330-335.	1.2	7
46	Analysis of the ionization potentials of small superalkali lithium clusters based on quantum Monte Carlo simulations. Chemical Physics Letters, 2018, 708, 54-60.	1.2	7
47	Quantum Monte Carlo simulation for the many-body decomposition of the interaction energy and electron correlation of small superalkali lithium clusters. Journal of Chemical Physics, 2019, 151, 014303.	1.2	7
48	Capillary waves in ^3He solutions and the properties of localized electrons on the helium surface. Physical Review B, 1997, 55, R3370-R3373.	1.1	6
49	Interface effects on magnetopolarons in $\text{GaAs}/\text{Al}_x\text{Ga}_{1-x}\text{As}$ quantum wells at high magnetic fields. Physical Review B, 1998, 58, 7822-7828.	1.1	6
50	High-energy transitions of shallow magnetodons in a $\text{GaAs}/\text{Al}_{0.3}\text{Ga}_{0.7}\text{As}$ multiple quantum well. Journal of Physics Condensed Matter, 2001, 13, 9761-9772.	0.7	6
51	Quantum transport in $\tilde{\Gamma}$ -doped quantum wells. Physical Review B, 1997, 55, 6708-6711.	1.1	5
52	Level-broadening effects on the inelastic light-scattering spectrum due to coupled plasmon-phonon modes in $\tilde{\Gamma}$ -doped semiconductors. Physical Review B, 1998, 57, 2276-2279.	1.1	5
53	The eutectic composition on $\text{Cd} \times \text{Pb} 1 \times \text{F} 2$ phase diagram: A molecular-dynamics study. Europhysics Letters, 2005, 71, 770-775.	0.7	5
54	Electron relaxation induced by electron longitudinal-acoustic-phonon scattering in single and coupled quantum dots in external magnetic and electric fields. Physical Review B, 2006, 74, .	1.1	5

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55	Exchange effects on electron scattering through a quantum dot embedded in a two-dimensional semiconductor structure. <i>Physical Review B</i> , 2007, 76, .	1.1	5
56	Artificial molecular quantum rings under magnetic field influence. <i>Journal of Applied Physics</i> , 2009, 106, 073702.	1.1	5
57	Mechanism of point-defect diffusion in a two-dimensional colloidal crystal. <i>Applied Physics Letters</i> , 2011, 99, 031904.	1.5	5
58	Effect of long cyclic exchanges on the magnetic properties of bcc3He. <i>Physical Review B</i> , 2011, 84, .	1.1	5
59	Interface optical phonon mode coupling in GaAs/AlAs quantum wells at high magnetic fields. <i>Physica B: Condensed Matter</i> , 1993, 184, 289-292.	1.3	4
60	Damping of interfacial waves in $^3\text{He}/^4\text{He}$ layered mixtures. <i>Physical Review B</i> , 1997, 56, 8988-8996.	1.1	4
61	Mobility of electrons in a quasi-one-dimensional conducting channel on the liquid helium surface in the presence of a magnetic field. <i>Low Temperature Physics</i> , 1997, 23, 487-491.	0.2	4
62	High-field cyclotron resonance and electron-phonon interaction in modulation-doped multiple quantum well structures. <i>Physica B: Condensed Matter</i> , 1998, 256-258, 292-299.	1.3	4
63	Collective and single-particle excitations in coupled quantum wires in magnetic fields. <i>Physical Review B</i> , 2002, 65, .	1.1	4
64	Multiband electron resonant Raman scattering in quantum wells in a magnetic field. <i>Physical Review B</i> , 2003, 67, .	1.1	4
65	Low-temperature electron mobilities due to ionized-impurity scattering in multisubband two-dimensional semiconductor systems. <i>Physical Review B</i> , 2004, 70, .	1.1	4
66	Zeeman effect and magnetic field induced spin-hybridization in semiconductor quantum dots. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 6949-6960.	0.7	4
67	Comment on "Field-controlled suppression of phonon-induced transitions in coupled quantum dots" [Appl. Phys. Lett. 85, 4729 (2004)]. <i>Applied Physics Letters</i> , 2006, 88, 196101.	1.5	4
68	Energy States of Phosphorous Donor in Silicon in Fields up to 18 T. <i>Journal of Low Temperature Physics</i> , 2010, 159, 226-229.	0.6	4
69	Sorting the modes contributing to guidance in strain-induced graphene waveguides. <i>New Journal of Physics</i> , 2013, 15, 023015.	1.2	4
70	Metastable electron-pair states in a two-dimensional crystal. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 115502.	0.7	4
71	Effects of intersubband interaction on multisubband electron transport in single and double quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1998, 2, 222-227.	1.3	3
72	Optical properties of δ -doped semiconductors: Plasmon-phonon coupling and Raman spectra. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1998, 2, 267-271.	1.3	3

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73	Inelastic light scattering spectra due to coupled plasmon modes in parallel quantum wires. Journal of Physics Condensed Matter, 2001, 13, 6421-6432.	0.7	3
74	Raman spectra of a two-dimensional electron gas in narrow-gap semiconductor quantum wells in magnetic fields: Spin-flip and anisotropic effects. Physical Review B, 2002, 66, .	1.1	3
75	Tunneling effects on the impurity spectral function in coupled asymmetric quantum wires. Physical Review B, 2003, 68, .	1.1	3
76	Intersubband plasmons in quasi-one-dimensional electron systems on a liquid helium surface. Physical Review B, 2003, 68, .	1.1	3
77	Magnetoresistance of nondegenerate quantum electron channels formed on the surface of superfluid helium. Physical Review B, 2004, 69, .	1.1	3
78	Path-integral Monte Carlo simulations on the thermodynamic properties of single-layer hexagonal boron nitride. Computational Condensed Matter, 2022, 31, e00660.	0.9	3
79	Effects of intersubband coupling on Friedel oscillations in quasi-two-dimensional electron systems. Superlattices and Microstructures, 1999, 25, 185-189.	1.4	2
80	Channel magnetotransport of surface electrons on superfluid helium. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 950-952.	1.3	2
81	Fast electron relaxation times in coupled double quantum well structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 794-797.	1.3	2
82	High-frequency magnetoconductivity of electrons in non-uniform heterostructures. Solid State Communications, 2002, 122, 89-93.	0.9	2
83	CALCULATION OF MAGNETODONOR STATES IN InP AND POLARON EFFECTS. International Journal of Modern Physics B, 2009, 23, 3014-3018.	1.0	2
84	Hamiltonian of a many-electron system with single-electron and electron-pair states in a two-dimensional periodic potential. European Physical Journal B, 2015, 88, 1.	0.6	2
85	Energy states and kinetic properties of electrons in a quasi-one-dimensional channel over liquid helium in the presence of a transverse magnetic field. European Physical Journal D, 1996, 46, 311-312.	0.4	1
86	Mode damping of layered $^3\text{He}/^4\text{He}$ films over a solid substrate. Physical Review B, 2000, 62, 584-591.	1.1	1
87	Effective conductivity of two-dimensional electrons in heterostructures with nonuniform doping. Physical Review B, 2002, 65, .	1.1	1
88	Spin-polarized current produced by a double barrier resonant tunneling diode. Solid State Communications, 2003, 127, 489-492.	0.9	1
89	Electron scattering through a quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 466-468.	0.8	1
90	Ground state configurations of vertically coupled quantum rings. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 560-562.	0.8	1

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91	Two-dimensional electron states bound to an off-plane donor in a magnetic field. Journal of Physics Condensed Matter, 2010, 22, 125801.	0.7	1
92	Mobility of electrons in a quasi-one-dimensional conducting channel on the liquid helium surface. European Physical Journal D, 1996, 46, 309-310.	0.4	0
93	Resonant magnetopolaron effects in GaAs/AlGaAs multiple quantum well structures. Physica E: Low-Dimensional Systems and Nanostructures, 1998, 2, 161-165.	1.3	0
94	Collective excitations and inelastic Coulomb scattering rate of coupled Q1D electron gases in semiconductor quantum wires. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 541-544.	1.3	0
95	Quantum interference effects on the conductance of a finite antidot array in a quantum wire. Solid State Communications, 2001, 117, 723-726.	0.9	0
96	Correlation energy of coupled double electron layers. Microelectronics Journal, 2003, 34, 569-570.	1.1	0
97	Interwire element of an impurity spectral function in coupled asymmetric quantum wires. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 479-482.	1.3	0
98	Intersubband excitations at finite temperatures and their roles in different quasi-one-dimensional systems. Brazilian Journal of Physics, 2006, 36, 415-418.	0.7	0
99	Ground-state energy of a classical artificial molecule. European Physical Journal B, 2008, 64, 81-86.	0.6	0
100	Electronic structure of metal-doped aluminum clusters by quantum Monte Carlo method. Journal of Physics: Conference Series, 2020, 1483, 012005.	0.3	0