Cheol-Hwan Park

List of Publications by Year
in descending order

71 papers	10,005 citations	94433 37 h-index	98798 67 g-index
75 all docs	75 docs citations	75 times ranked	11788 citing authors

#	Article	IF	Citations
1	Comprehensive theory of second-order spin photocurrents. Physical Review B, 2022, 105, .	3.2	9
2	General, Strong Impurity-Strength Dependence of Quasiparticle Interference. Journal of Physical Chemistry C, 2021, 125, 7488-7494.	3.1	0
3	Chemical control of the Rashba spin splitting size of Î± -GeTe(111) surface states by adjusting the potential at the topmost atomic layer. Physical Review B, 2021, 103, .	3.2	1
4	Gaussian time-dependent variational principle for the finite-temperature anharmonic lattice dynamics. Physical Review Research, 2021, 3, .	3.6	5
5	Magnetic Anisotropy and Magnetic Ordering of Transition-Metal Phosphorus Trisulfides. Nano Letters, 2021, 21, 10114-10121.	9.1	27
6	Wannier Function Perturbation Theory: Localized Representation and Interpolation of Wave Function Perturbation. Physical Review X, 2021, 11, .	8.9	6
7	Kagome van-der-Waals Pd3P2S8 with flat band. Scientific Reports, 2020, 10, 20998.	3.3	16
8	Phonon-induced renormalization of electron wave functions. Physical Review B, 2020, 101, .	3.2	24
9	Computation of intrinsic spin Hall conductivities from first principles using maximally localized Wannier functions. Physical Review B, 2019, 99, .	3.2	26
10	Suppression of magnetic ordering in XXZ-type antiferromagnetic monolayer NiPS3. Nature Communications, 2019, 10, 345.	12.8	255
11	Antiferromagnetic ordering in van der Waals 2D magnetic material MnPS ₃ probed by Raman spectroscopy. 2D Materials, 2019, 6, 041001.	4.4	120
12	Reliable methods for seamless stitching of tight-binding models based on maximally localized Wannier functions. Physical Review B, 2019, 99, .	3.2	6
13	Bulk properties of the van der Waals hard ferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>VI</mml:mi><mml:mn>3</mml:mn></mml:msub></mm Physical Review B, 2019, 99, .	3.2	98
14	A Rigorous Method of Calculating Exfoliation Energies from First Principles. Nano Letters, 2018, 18, 2759-2765.	9.1	207
15	Charge-Spin Correlation in van der Waals Antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>NiPS</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn> Physical Review Letters, 2018, 120, 136402.	7.8	120
16	Terahertz rectification in ring-shaped quantum barriers. Nature Communications, 2018, 9, 4914.	12.8	19
17	Tunneling Rectification in Ring Shaped Nanogaps. , 2018, , .		0
18	Effects of spin-orbit coupling on the optical response of a material. Physical Review B, 2018, 98, .	3.2	5

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19	Momentum-dependent spin selection rule in photoemission with glide symmetry. Physical Review B, 2018, 98, .	3.2	4
20	Hidden orbital polarization in diamond, silicon, germanium, gallium arsenide and layered materials. NPG Asia Materials, 2017, 9, e382-e382.	7.9	27
21	Electronic structure of charged bilayer and trilayer phosphorene. Physical Review B, 2017, 96, .	3.2	15
22	Symmetry rules shaping spin-orbital textures in surface states. Physical Review B, 2017, 95, .	3.2	9
23	Breakdown of the Chiral Anomaly in Weyl Semimetals in a Strong Magnetic Field. Physical Review Letters, 2017, 119, 266401.	7.8	38
24	Terahertz funneling-induced quantum tunneling at angstrom scale. , 2016, , .		1
25	Tunnelling current-voltage characteristics of Angstrom gaps measured with terahertz time-domain spectroscopy. Scientific Reports, 2016, 6, 29103.	3.3	18
26	Spin-conserving and reversing photoemission from the surface states ofBi2Se3and Au (111). Physical Review B, 2016, 93, .	3.2	11
27	Ising-Type Magnetic Ordering in Atomically Thin FePS₃. Nano Letters, 2016, 16, 7433-7438.	9.1	690
28	Optical responses of a metal with sub-nm gaps. Scientific Reports, 2016, 6, 22981.	3.3	6
29	The electronic structure and intervalley coupling of artificial and genuine graphene superlattices. Nano Research, 2016, 9, 1101-1115.	10.4	5
30	The Electronic Thermal Conductivity of Graphene. Nano Letters, 2016, 16, 2439-2443.	9.1	137
31	Terahertz Quantum Plasmonics at Angstrom Scale. , 2016, , .		0
32	Electromagnetic Saturation of Angstrom-Sized Quantum Barriers at Terahertz Frequencies. Physical Review Letters, 2015, 115, 125501.	7.8	60
33	Colossal terahertz nonlinearity of angstrom-sized infinite gaps. , 2015, , .		0
34	Bright visible light emission from graphene. Nature Nanotechnology, 2015, 10, 676-681.	31.5	284
35	Variational minimization of orbital-density-dependent functionals. Physical Review B, 2015, 91, .	3.2	29
36	Insights and challenges of applying the<i>GW</i>method to transition metal oxides. Journal of Physics Condensed Matter, 2014, 26, 475501.	1.8	16

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37	Phonon-limited resistivity of graphene by first-principles calculations: Electron-phonon interactions, strain-induced gauge field, and Boltzmann equation. Physical Review B, 2014, 90, .	3.2	105
38	Electron Supercollimation in Graphene and Dirac Fermion Materials Using One-Dimensional Disorder Potentials. Physical Review Letters, 2014, 113, 026802.	7.8	24
39	Electronâ€“Phonon Interactions and the Intrinsic Electrical Resistivity of Graphene. Nano Letters, 2014, 14, 1113-1119.	9.1	149
40	Donor and acceptor levels of organic photovoltaic compounds from first principles. Physical Chemistry Chemical Physics, 2013, 15, 685-695.	2.8	36
41	Photoelectron spin-flipping and texture manipulation in a topological insulator. Nature Physics, 2013, 9, 293-298.	16.7	176
42	Spin Polarization of Photoelectrons from Topological Insulators. Physical Review Letters, 2012, 109, 097601.	7.8	89
43	Inelastic carrier lifetime in bilayer graphene. Applied Physics Letters, 2012, 100, .	3.3	7
44	Berry phase and pseudospin winding number in bilayer graphene. Physical Review B, 2011, 84, .	3.2	85
45	New Dirac Fermions in Periodically Modulated Bilayer Graphene. Nano Letters, 2011, 11, 2596-2600.	9.1	22
46	Controlling inelastic light scattering quantum pathways in graphene. Nature, 2011, 471, 617-620.	27.8	492
47	Theory of the electronic and transport properties of graphene under a periodic electric or magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 651-656.	2.7	17
48	Direct measurement of quantum phases in graphene via photoemission spectroscopy. Physical Review B, 2011, 84, .	3.2	91
49	Many-body interactions in quasi-freestanding graphene. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11365-11369.	7.1	200
50	Observation of Carrier-Density-Dependent Many-Body Effects in Graphene via Tunneling Spectroscopy. Physical Review Letters, 2010, 104, 036805.	7.8	106
51	EPW: A program for calculating the electronâ€“phonon coupling using maximally localized Wannier functions. Computer Physics Communications, 2010, 181, 2140-2148.	7.5	324
52	Optical spectroscopy of bilayer graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2931-2934.	1.5	3
53	A tunable phononâ€“exciton Fano system in bilayer graphene. Nature Nanotechnology, 2010, 5, 32-36.	31.5	146
54	<i>Ab initio</i>calculations of pressure-induced structural phase transitions of GeTe. Physical Review B, 2010, 82, .	3.2	27

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55	Tunable Excitons in Biased Bilayer Graphene. Nano Letters, 2010, 10, 426-431.	9.1	81
56	Graphene Dirac fermions in one-dimensional inhomogeneous field profiles: Transforming magnetic to electric field. Physical Review B, 2010, 81, .	3.2	98
57	Angle-Resolved Photoemission Spectra of Graphene from First-Principles Calculations. Nano Letters, 2009, 9, 4234-4239.	9.1	102
58	First-Principles Study of Electron Linewidths in Graphene. Physical Review Letters, 2009, 102, 076803.	7.8	72
59	Excitonic Effects on the Optical Response of Graphene and Bilayer Graphene. Physical Review Letters, 2009, 103, 186802.	7.8	604
60	Landau Levels and Quantum Hall Effect in Graphene Superlattices. Physical Review Letters, 2009, 103, 046808.	7.8	137
61	Making Massless Dirac Fermions from a Patterned Two-Dimensional Electron Gas. Nano Letters, 2009, 9, 1793-1797.	9.1	151
62	Graphene at the Edge: Stability and Dynamics. Science, 2009, 323, 1705-1708.	12.6	1,153
63	Anisotropic behaviours of massless DiracÂfermions in graphene under periodicÂpotentials. Nature Physics, 2008, 4, 213-217.	16.7	609
64	Energy Gaps and Stark Effect in Boron Nitride Nanoribbons. Nano Letters, 2008, 8, 2200-2203.	9.1	370
65	Electron Beam Supercollimation in Graphene Superlattices. Nano Letters, 2008, 8, 2920-2924.	9.1	253
66	Electronâ˘Phonon Interactions in Graphene, Bilayer Graphene, and Graphite. Nano Letters, 2008, 8, 4229-4233.	9.1	156
67	New Generation of Massless Dirac Fermions in Graphene under External Periodic Potentials. Physical Review Letters, 2008, 101, 126804.	7.8	370
68	Van Hove singularity and apparent anisotropy in the electron-phonon interaction in graphene. Physical Review B, 2008, 77, .	3.2	50
69	Velocity Renormalization and Carrier Lifetime in Graphene from the Electron-Phonon Interaction. Physical Review Letters, 2007, 99, 086804.	7.8	183
70	Quasiparticle Energies and Band Gaps in Graphene Nanoribbons. Physical Review Letters, 2007, 99, 186801.	7.8	1,092
71	Excitons and Many-Electron Effects in the Optical Response of Single-Walled Boron Nitride Nanotubes. Physical Review Letters, 2006, 96, 126105.	7.8	121