Cheol-Hwan Park

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7939776/publications.pdf

Version: 2024-02-01

71	10,005	94433	98798
papers	citations	37 h-index	67 g-index

75	75	75	11788
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphene at the Edge: Stability and Dynamics. Science, 2009, 323, 1705-1708.	12.6	1,153
2	Quasiparticle Energies and Band Gaps in Graphene Nanoribbons. Physical Review Letters, 2007, 99, 186801.	7.8	1,092
3	Ising-Type Magnetic Ordering in Atomically Thin FePS₃. Nano Letters, 2016, 16, 7433-7438.	9.1	690
4	Anisotropic behaviours of massless DiracÂfermions in graphene under periodicÂpotentials. Nature Physics, 2008, 4, 213-217.	16.7	609
5	Excitonic Effects on the Optical Response of Graphene and Bilayer Graphene. Physical Review Letters, 2009, 103, 186802.	7.8	604
6	Controlling inelastic light scattering quantum pathways in graphene. Nature, 2011, 471, 617-620.	27.8	492
7	Energy Gaps and Stark Effect in Boron Nitride Nanoribbons. Nano Letters, 2008, 8, 2200-2203.	9.1	370
8	New Generation of Massless Dirac Fermions in Graphene under External Periodic Potentials. Physical Review Letters, 2008, 101, 126804.	7.8	370
9	EPW: A program for calculating the electronâ€“phonon coupling using maximally localized Wannier functions. Computer Physics Communications, 2010, 181, 2140-2148.	7.5	324
10	Bright visible light emission from graphene. Nature Nanotechnology, 2015, 10, 676-681.	31.5	284
11	Suppression of magnetic ordering in XXZ-type antiferromagnetic monolayer NiPS3. Nature Communications, 2019, 10, 345.	12.8	255
12	Electron Beam Supercollimation in Graphene Superlattices. Nano Letters, 2008, 8, 2920-2924.	9.1	253
13	A Rigorous Method of Calculating Exfoliation Energies from First Principles. Nano Letters, 2018, 18, 2759-2765.	9.1	207
14	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
15	Velocity Renormalization and Carrier Lifetime in Graphene from the Electron-Phonon Interaction. Physical Review Letters, 2007, 99, 086804.	7.8	183
16	Photoelectron spin-flipping and texture manipulation in a topological insulator. Nature Physics, 2013, 9, 293-298.	16.7	176
17	Electronâ"Phonon Interactions in Graphene, Bilayer Graphene, and Graphite. Nano Letters, 2008, 8, 4229-4233.	9.1	156
18	Making Massless Dirac Fermions from a Patterned Two-Dimensional Electron Gas. Nano Letters, 2009, 9, 1793-1797.	9.1	151

#	Article	IF	Citations
19	Electronâ€“Phonon Interactions and the Intrinsic Electrical Resistivity of Graphene. Nano Letters, 2014, 14, 1113-1119.	9.1	149
20	A tunable phononâ€“exciton Fano system in bilayer graphene. Nature Nanotechnology, 2010, 5, 32-36.	31.5	146
21	Landau Levels and Quantum Hall Effect in Graphene Superlattices. Physical Review Letters, 2009, 103, 046808.	7.8	137
22	The Electronic Thermal Conductivity of Graphene. Nano Letters, 2016, 16, 2439-2443.	9.1	137
23	Excitons and Many-Electron Effects in the Optical Response of Single-Walled Boron Nitride Nanotubes. Physical Review Letters, 2006, 96, 126105.	7.8	121
24	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
25	Antiferromagnetic ordering in van der Waals 2D magnetic material MnPS ₃ probed by Raman spectroscopy. 2D Materials, 2019, 6, 041001.	4.4	120
26	Observation of Carrier-Density-Dependent Many-Body Effects in Graphene via Tunneling Spectroscopy. Physical Review Letters, 2010, 104, 036805.	7.8	106
27	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
28	Angle-Resolved Photoemission Spectra of Graphene from First-Principles Calculations. Nano Letters, 2009, 9, 4234-4239.	9.1	102
29	Graphene Dirac fermions in one-dimensional inhomogeneous field profiles: Transforming magnetic to electric field. Physical Review B, 2010, 81, .	3.2	98
30	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></mml: Physical Review B, 2019, 99, .	3.2	98
31	Direct measurement of quantum phases in graphene via photoemission spectroscopy. Physical Review B, 2011, 84, .	3.2	91
32	Spin Polarization of Photoelectrons from Topological Insulators. Physical Review Letters, 2012, 109, 097601.	7.8	89
33	Berry phase and pseudospin winding number in bilayer graphene. Physical Review B, 2011, 84, .	3.2	85
34	Tunable Excitons in Biased Bilayer Graphene. Nano Letters, 2010, 10, 426-431.	9.1	81
35	First-Principles Study of Electron Linewidths in Graphene. Physical Review Letters, 2009, 102, 076803.	7.8	72
36	Electromagnetic Saturation of Angstrom-Sized Quantum Barriers at Terahertz Frequencies. Physical Review Letters, 2015, 115, 125501.	7.8	60

#	Article	IF	Citations
37	Van Hove singularity and apparent anisotropy in the electron-phonon interaction in graphene. Physical Review B, 2008, 77, .	3.2	50
38	Breakdown of the Chiral Anomaly in Weyl Semimetals in a Strong Magnetic Field. Physical Review Letters, 2017, 119, 266401.	7.8	38
39	Donor and acceptor levels of organic photovoltaic compounds from first principles. Physical Chemistry Chemical Physics, 2013, 15, 685-695.	2.8	36
40	Variational minimization of orbital-density-dependent functionals. Physical Review B, 2015, 91, .	3.2	29
41	Ab initiocalculations of pressure-induced structural phase transitions of GeTe. Physical Review B, 2010, 82, .	3.2	27
42	Hidden orbital polarization in diamond, silicon, germanium, gallium arsenide and layered materials. NPG Asia Materials, 2017, 9, e382-e382.	7.9	27
43	Magnetic Anisotropy and Magnetic Ordering of Transition-Metal Phosphorus Trisulfides. Nano Letters, 2021, 21, 10114-10121.	9.1	27
44	Computation of intrinsic spin Hall conductivities from first principles using maximally localized Wannier functions. Physical Review B, 2019, 99, .	3.2	26
45	Electron Supercollimation in Graphene and Dirac Fermion Materials Using One-Dimensional Disorder Potentials. Physical Review Letters, 2014, 113, 026802.	7.8	24
46	Phonon-induced renormalization of electron wave functions. Physical Review B, 2020, 101, .	3.2	24
47	New Dirac Fermions in Periodically Modulated Bilayer Graphene. Nano Letters, 2011, 11, 2596-2600.	9.1	22
48	Terahertz rectification in ring-shaped quantum barriers. Nature Communications, 2018, 9, 4914.	12.8	19
49	Tunnelling current-voltage characteristics of Angstrom gaps measured with terahertz time-domain spectroscopy. Scientific Reports, 2016, 6, 29103.	3.3	18
50	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
51	Insights and challenges of applying theGWmethod to transition metal oxides. Journal of Physics Condensed Matter, 2014, 26, 475501.	1.8	16
52	Kagome van-der-Waals Pd3P2S8 with flat band. Scientific Reports, 2020, 10, 20998.	3.3	16
53	Electronic structure of charged bilayer and trilayer phosphorene. Physical Review B, 2017, 96, .	3.2	15
54	Spin-conserving and reversing photoemission from the surface states ofBi2Se3and Au (111). Physical Review B, 2016, 93, .	3.2	11

#	Article	IF	Citations
55	Symmetry rules shaping spin-orbital textures in surface states. Physical Review B, 2017, 95, .	3.2	9
56	Comprehensive theory of second-order spin photocurrents. Physical Review B, 2022, 105, .	3.2	9
57	Inelastic carrier lifetime in bilayer graphene. Applied Physics Letters, 2012, 100, .	3.3	7
58	Optical responses of a metal with sub-nm gaps. Scientific Reports, 2016, 6, 22981.	3.3	6
59	Reliable methods for seamless stitching of tight-binding models based on maximally localized Wannier functions. Physical Review B, 2019, 99, .	3.2	6
60	Wannier Function Perturbation Theory: Localized Representation and Interpolation of Wave Function Perturbation. Physical Review X, 2021, 11, .	8.9	6
61	The electronic structure and intervalley coupling of artificial and genuine graphene superlattices. Nano Research, 2016, 9, 1101-1115.	10.4	5
62	Effects of spin-orbit coupling on the optical response of a material. Physical Review B, 2018, 98, .	3.2	5
63	Gaussian time-dependent variational principle for the finite-temperature anharmonic lattice dynamics. Physical Review Research, 2021, 3, .	3.6	5
64	Momentum-dependent spin selection rule in photoemission with glide symmetry. Physical Review B, 2018, 98, .	3.2	4
65	Optical spectroscopy of bilayer graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2931-2934.	1.5	3
66	Terahertz funneling-induced quantum tunneling at angstrom scale. , 2016, , .		1
67	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
68	Colossal terahertz nonlinearity of angstrom-sized infinite gaps. , 2015, , .		0
69	Tunneling Rectification in Ring Shaped Nanogaps. , 2018, , .		0
70	General, Strong Impurity-Strength Dependence of Quasiparticle Interference. Journal of Physical Chemistry C, 2021, 125, 7488-7494.	3.1	0
71	Terahertz Quantum Plasmonics at Angstrom Scale. , 2016, , .		0