

Shuaiwei Wang

List of Publications by Year in descending order

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Version: 2024-02-01

24
papers

2,278
citations

516710

16
h-index

610901

24
g-index

25
all docs

25
docs citations

25
times ranked

2400
citing authors

#	ARTICLE	IF	CITATIONS
1	Correlation hole of the spin-polarized electron gas, with exact small-wave-vector and high-density scaling. <i>Physical Review B</i> , 1991, 44, 13298-13307.	3.2	1,315
2	Popgraphene: a new 2D planar carbon allotrope composed of 5-8 carbon rings for high-performance lithium-ion battery anodes from bottom-up programming. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6815-6821.	10.3	212
3	Reconfiguring graphene for high-performance metal-ion battery anodes. <i>Energy Storage Materials</i> , 2019, 16, 619-624.	18.0	143
4	Two-Dimensional Carbon-Based Auxetic Materials for Broad-Spectrum Metal-Ion Battery Anodes. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3269-3275.	4.6	64
5	Strength and failure behavior of a graphene sheet containing bi-grain-boundaries. <i>RSC Advances</i> , 2014, 4, 54677-54683.	3.6	61
6	Fracture behaviors of brittle and ductile 2D carbon structures under uniaxial tensile stress. <i>Carbon</i> , 2017, 111, 486-492.	10.3	59
7	Large-Scale Molecular Simulations on the Mechanical Response and Failure Behavior of a defective Graphene: Cases of 5-8 Defects. <i>Scientific Reports</i> , 2015, 5, 14957.	3.3	50
8	Tunable thermal transport and mechanical properties of graphyne heterojunctions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 24210-24218.	2.8	49
9	New Ab Initio Based Pair Potential for Accurate Simulation of Phase Transitions in ZnO. <i>Journal of Physical Chemistry C</i> , 2014, 118, 11050-11061.	3.1	45
10	Semimetallic carbon honeycombs: new three-dimensional graphene allotropes with Dirac cones. <i>Nanoscale</i> , 2018, 10, 2748-2754.	5.6	43
11	Highly negative Poisson's ratio in a flexible two-dimensional tungsten carbide monolayer. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 18924-18930.	2.8	42
12	Mechanical Properties and Failure Mechanisms of Graphene under a Central Load. <i>ChemPhysChem</i> , 2014, 15, 2749-2755.	2.1	38
13	Modulation of the electronic and mechanical properties of phagraphene via hydrogenation and fluorination. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11771-11777.	2.8	35
14	Bco-C24: A new 3D Dirac nodal line semi-metallic carbon honeycomb for high performance metal-ion battery anodes. <i>Carbon</i> , 2020, 159, 542-548.	10.3	30
15	Stabilization of two-dimensional penta-silicene for flexible lithium-ion battery anodes via surface chemistry reconfiguration. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 1029-1037.	2.8	27
16	Lattice thermal conductivity of γ -graphyne: A molecular dynamics study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 90, 116-122.	2.7	17
17	Vacancy-vacancy pairs induced new phase formation in carbon boride: A design principle to achieve superior performance Li/Na-ion battery anodes. <i>EcoMat</i> , 2022, 4, .	11.9	16
18	A new Dirac nodal-ring semimetal made of 3D cross-linked graphene networks as lithium ion battery anode materials. <i>Nanoscale</i> , 2020, 12, 12985-12992.	5.6	9

#	ARTICLE	IF	CITATIONS
19	Mechanical deformation: A feasible route for reconfiguration of inner interfaces to modulate the high performance of three-dimensional porous carbon material anodes in stretchable lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2019, 555, 431-437.	9.4	8
20	Dirac Nodal Line Semimetal of Three-Dimensional Cross-Linked Graphene Network as Anode Materials for Li-Ion Battery beyond Graphite. <i>ACS Applied Energy Materials</i> , 2021, 4, 2091-2097.	5.1	6
21	Auxetic Carbon Honeycomb: Strain-Tunable Phase Transitions and Novel Negative Poisson's Ratio. <i>ACS Omega</i> , 2021, 6, 14896-14902.	3.5	3
22	A Dirac nodal surface semi-metallic carbon-based structure as a universal anode material for metal-ion batteries with high performance. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18744-18751.	2.8	3
23	Reconfiguring graphene to achieve intrinsic negative Poisson's ratio and strain-tunable bandgap. <i>Nanotechnology</i> , 2021, 32, 415705.	2.6	2
24	Adsorption Mechanism and High-Performance Metal-Ion Batteries Anode Material for Semimetal Carbon Honeycomb. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 2000433.	1.8	1