Hengxing Ji

List of Publications by Citations

110 papers	10,979 citations	52 h-index	104 g-index
116 ext. papers	12,591 ext. citations	12.4 avg, IF	6.36 L-index

#	Paper	IF	Citations
110	Nanoporous Ni(OH)2 thin film on 3D Ultrathin-graphite foam for asymmetric supercapacitor. *ACS Nano*, **2013**, 7, 6237-43	16.7	925
109	Highly conductive and porous activated reduced graphene oxide films for high-power supercapacitors. *Nano Letters*, **2012**, 12, 1806-12	11.5	782
108	Cobalt in Nitrogen-Doped Graphene as Single-Atom Catalyst for High-Sulfur Content Lithium-Sulfur Batteries. *Journal of the American Chemical Society*, **2019**, 141, 3977-3985	16.4	626
107	Capacitance of carbon-based electrical double-layer capacitors. *Nature Communications*, **2014**, 5, 3317	17.4	463
106	Enhanced thermal conductivity of phase change materials with ultrathin-graphite foams for thermal energy storage. *Energy and Environmental Science*, **2014**, 7, 1185-1192	35.4	410
105	Ultrathin graphite foam: a three-dimensional conductive network for battery electrodes. *Nano Letters*, **2012**, 12, 2446-51	11.5	360
104	A Hierarchical Carbon Derived from Sponge-Templated Activation of Graphene Oxide for High-Performance Supercapacitor Electrodes. *Advanced Materials*, **2016**, 28, 5222-8	24	323
103	Black Phosphorus Revisited: A Missing Metal-Free Elemental Photocatalyst for Visible Light Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1605776	24	309
102	Nitrogen doping of graphene and its effect on quantum capacitance, and a new insight on the enhanced capacitance of N-doped carbon. *Energy and Environmental Science*, **2012**, 5, 9618	35.4	307
101	Graphene-encapsulated Si on ultrathin-graphite foam as anode for high capacity lithium-ion batteries. *Advanced Materials*, **2013**, 25, 4673-7	24	291
100	Thermal transport in three-dimensional foam architectures of few-layer graphene and ultrathin graphite. *Nano Letters*, **2012**, 12, 2959-64	11.5	285
99	Stretchable graphene: a close look at fundamental parameters through biaxial straining. *Nano Letters*, **2010**, 10, 3453-8	11.5	275
98	Cu-Si nanocable arrays as high-rate anode materials for lithium-ion batteries. *Advanced Materials*, **2011**, 23, 4415-20	24	266
97	Millimeter-size single-crystal graphene by suppressing evaporative loss of Cu during low pressure chemical vapor deposition. *Advanced Materials*, **2013**, 25, 2062-5	24	246
96	Low-temperature chemical vapor deposition growth of graphene from toluene on electropolished copper foils. *ACS Nano*, **2012**, 6, 2471-6	16.7	211
95	Degradation Chemistry and Stabilization of Exfoliated Few-Layer Black Phosphorus in Water. *Journal of the American Chemical Society*, **2018**, 140, 7561-7567	16.4	185
94	A Highly Efficient Metal-Free Oxygen Reduction Electrocatalyst Assembled from Carbon Nanotubes and Graphene. *Advanced Materials*, **2016**, 28, 4606-13	24	178

93	Crystalline Copper Phosphide Nanosheets as an Efficient Janus Catalyst for Overall Water Splitting. *ACS Applied Materials & Interfaces*, **2017**, 9, 2240-2248	9.5	175
92	Naturally rolled-up C/Si/C trilayer nanomembranes as stable anodes for lithium-ion batteries with remarkable cycling performance. *Angewandte Chemie - International Edition*, **2013**, 52, 2326-30	16.4	167
91	Mass production and industrial applications of graphene materials. *National Science Review*, **2018**, 5, 90-101	10.8	158
90	Black phosphorus composites with engineered interfaces for high-rate high-capacity lithium storage. *Science*, **2020**, 370, 192-197	33.3	156
89	Covalently Connected Carbon Nanostructures for Current Collectors in Both the Cathode and Anode of Li-S Batteries. *Advanced Materials*, **2016**, 28, 9094-9102	24	154
88	Growth mechanism and controlled synthesis of AB-stacked bilayer graphene on Cu-Ni alloy foils. *ACS Nano*, **2012**, 6, 7731-8	16.7	143
87	Direct Laser Writing of Graphene Made from Chemical Vapor Deposition for Flexible, Integratable Micro-Supercapacitors with Ultrahigh Power Output. *Advanced Materials*, **2018**, 30, e1801384	24	137
86	Incorporating Pyrrolic and Pyridinic Nitrogen into a Porous Carbon made from C Molecules to Obtain Superior Energy Storage. *Advanced Materials*, **2017**, 29, 1603414	24	132
85	Robust Expandable Carbon Nanotube Scaffold for Ultrahigh-Capacity Lithium-Metal Anodes. *Advanced Materials*, **2018**, 30, e1800884	24	132
84	A robust hydrogen evolution catalyst based on crystalline nickel phosphide nanoflakes on three-dimensional graphene/nickel foam: high performance for electrocatalytic hydrogen production from pH 0–14. *Journal of Materials Chemistry A*, **2015**, 3, 1941-1946	13	123
83	High Areal Capacity and Lithium Utilization in Anodes Made of Covalently Connected Graphite Microtubes. *Advanced Materials*, **2017**, 29, 1700783	24	123
82	Advanced 3D Current Collectors for Lithium-Based Batteries. *Advanced Materials*, **2018**, 30, e1802014	24	121
81	The Origin of Improved Electrical Double-Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. *Angewandte Chemie - International Edition*, **2016**, 55, 13822-13827	16.4	117
80	Selective surface functionalization at regions of high local curvature in graphene. *Chemical Communications*, **2013**, 49, 677-9	5.8	116
79	Stabilizing black phosphorus nanosheets via edge-selective bonding of sacrificial C molecules. *Nature Communications*, **2018**, 9, 4177	17.4	115
78	In Situ Activation of Nitrogen-Doped Graphene Anchored on Graphite Foam for a High-Capacity Anode. *ACS Nano*, **2015**, 9, 8609-16	16.7	103
77	Thermal conductivity measurements of suspended graphene with and without wrinkles by micro-Raman mapping. *Nanotechnology*, **2012**, 23, 365701	3.4	96
76	Free-standing boron and oxygen co-doped carbon nanofiber films for large volumetric capacitance and high rate capability supercapacitors. *Nano Energy*, **2015**, 15, 235-243	17.1	94

75	Self-wound composite nanomembranes as electrode materials for lithium ion batteries. *Advanced Materials*, **2010**, 22, 4591-5	24	92
74	Controllable Preparation of Submicrometer Single-Crystal C60 Rods and Tubes Trough Concentration Depletion at the Surfaces of Seeds. *Journal of Physical Chemistry C*, **2007**, 111, 10498-10502	3.8	89
73	Solid-Solution-Based Metal Alloy Phase for Highly Reversible Lithium Metal Anode. *Journal of the American Chemical Society*, **2020**, 142, 8818-8826	16.4	86
72	Graphene growth using a solid carbon feedstock and hydrogen. *ACS Nano*, **2011**, 5, 7656-61	16.7	84
71	Nitrogen-Doped Hollow Carbon Nanospheres for High-Performance Li-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 14180-14186	9.5	80
70	Azide Passivation of Black Phosphorus Nanosheets: Covalent Functionalization Affords Ambient Stability Enhancement. *Angewandte Chemie - International Edition*, **2019**, 58, 1479-1483	16.4	79
69	Well-elaborated, mechanochemically synthesized Fe-TPP?ZIF precursors (Fe-TPP = tetraphenylporphine iron) to atomically dispersed iron–nitrogen species for oxygen reduction reaction and Zn-air batteries. *Nano Energy*, **2018**, 52, 29-37	17.1	77
68	Creating Pores on Graphene Platelets by Low-Temperature KOH Activation for Enhanced Electrochemical Performance. *Small*, **2016**, 12, 2376-84	11	76
67	Controllable crystalline structure of fullerene nanorods and transport properties of an individual nanorod. *Journal of Materials Chemistry*, **2008**, 18, 328-332		76
66	The Charge Storage Mechanisms of 2D Cation-Intercalated Manganese Oxide in Different Electrolytes. *Advanced Energy Materials*, **2019**, 9, 1802707	21.8	67
65	Graphene synthesis via magnetic inductive heating of copper substrates. *ACS Nano*, **2013**, 7, 7495-9	16.7	62
64	Atom-Thick Interlayer Made of CVD-Grown Graphene Film on Separator for Advanced Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 43696-43703	9.5	62
63	Tuning the doping type and level of graphene with different gold configurations. *Small*, **2012**, 8, 3129-36	11	59
62	Carbonized-MOF as a Sulfur Host for Aluminum–Sulfur Batteries with Enhanced Capacity and Cycling Life. *Advanced Functional Materials*, **2019**, 29, 1807676	15.6	59
61	Detection of sulfur dioxide gas with graphene field effect transistor. *Applied Physics Letters*, **2012**, 100, 163114	3.4	57
60	Amorphous Molybdenum Sulfide/Carbon Nanotubes Hybrid Nanospheres Prepared by Ultrasonic Spray Pyrolysis for Electrocatalytic Hydrogen Evolution. *Small*, **2017**, 13, 1700111	11	55
59	A Black Phosphorus-Graphite Composite Anode for Li-/Na-/K-Ion Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 2318-2322	16.4	54
58	LiFePO4/reduced graphene oxide hybrid cathode for lithium ion battery with outstanding rate performance. *Journal of Materials Chemistry A*, **2014**, 2, 7812-7818	13	52

57	Naturally Rolled-Up C/Si/C Trilayer Nanomembranes as Stable Anodes for Lithium-Ion Batteries with Remarkable Cycling Performance. *Angewandte Chemie*, **2013**, 125, 2382-2386	3.6	51
56	Swiss roll nanomembranes with controlled proton diffusion as redox micro-supercapacitors. *Chemical Communications*, **2010**, 46, 3881-3	5.8	46
55	Origin of the Overpotential for the Oxygen Evolution Reaction on a Well-Defined Graphene Electrode Probed by in Situ Sum Frequency Generation Vibrational Spectroscopy. *Journal of the American Chemical Society*, **2018**, 140, 15568-15571	16.4	46
54	Copper oxide as a self-cleaning substrate for graphene growth. *Journal of Materials Research*, **2014**, 29, 403-409	2.5	44
53	Study on the diffusion mechanism of graphene grown on copper pockets. *Small*, **2015**, 11, 1418-22	11	43
52	Piezoelectric Materials as Sonodynamic Sensitizers to Safely Ablate Tumors: A Case Study Using Black Phosphorus. *Journal of Physical Chemistry Letters*, **2020**, 11, 1228-1238	6.4	43
51	Facile solution synthesis of hexagonal Alq3 nanorods and their field emission properties. *Chemical Communications*, **2007**, 3083-5	5.8	41
50	ZnOEP based phototransistor: signal amplification and light-controlled switch. *Chemical Communications*, **2008**, 2653-5	5.8	39
49	Synergy of Black Phosphorus-Graphite-Polyaniline-Based Ternary Composites for Stable High Reversible Capacity Na-Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 16656-16661	8.5	35
48	Ion-Transfer-Based Growth: A Mechanism for CuTCNQ Nanowire Formation. *Advanced Materials*, **2008**, 20, 4879-4882	24	35
47	A rechargeable aqueous aluminum-sulfur battery through acid activation in water-in-salt electrolyte. *Chemical Communications*, **2020**, 56, 2023-2026	5.8	35
46	Large-area, periodic, and tunable intrinsic pseudo-magnetic fields in low-angle twisted bilayer graphene. *Nature Communications*, **2020**, 11, 371	17.4	32
45	NS codoped carbon nanorods as anode materials for high-performance lithium and sodium ion batteries. *Journal of Energy Chemistry*, **2018**, 27, 203-208	12	27
44	Metal Octaethylporphyrin Nanowire Array and Network toward Electric/Photoelectric Devices. *Journal of Physical Chemistry C*, **2009**, 113, 16259-16265	3.8	25
43	Non-destructive and rapid evaluation of chemical vapor deposition graphene by dark field optical microscopy. *Applied Physics Letters*, **2013**, 103, 043119	3.4	24
42	Controllable atmospheric pressure growth of mono-layer, bi-layer and tri-layer graphene. *Chemical Communications*, **2014**, 50, 11012-5	5.8	22
41	Manipulating size of Li3V2(PO4)3 with reduced graphene oxide: towards high-performance composite cathode for lithium ion batteries. *Scientific Reports*, **2014**, 4, 5768	4.9	21
40	The correlation between carbon structures and electrochemical properties of sulfur/carbon composites for Li-S batteries. *Journal of Power Sources*, **2017**, 341, 139-146	8.9	20

39	From 1D Polymers to 2D Polymers: Preparation of Free-Standing Single-Monomer-Thick Two-Dimensional Conjugated Polymers in Water. *ACS Nano*, **2017**, 11, 7223-7229	16.7	19
38	Rapid Identification of the Layer Number of Large-Area Graphene on Copper. *Chemistry of Materials*, **2018**, 30, 2067-2073	9.6	19
37	Redistribution of Li-ions using covalent organic frameworks towards dendrite-free lithium anodes: a mechanism based on a Galton Board. *Science China Chemistry*, **2020**, 63, 1306-1314	7.9	19
36	Surface acoustic wave mediated dielectrophoretic alignment of rolled-up microtubes in microfluidic systems. *Applied Physics Letters*, **2010**, 96, 134105	3.4	18
35	TiN nanocrystal anchored on N-doped graphene as effective sulfur hosts for high-performance lithium-sulfur batteries. *Journal of Energy Chemistry*, **2021**, 54, 16-22	12	18
34	Vacuum Filtration-and-Transfer Technique Helps Electrochemical Quartz Crystal Microbalance to Reveal Accurate Charge Storage in Supercapacitors. *Small Methods*, **2019**, 3, 1900246	12.8	15
33	Scattering of phonons by high-concentration isotopic impurities in ultrathin graphite. *Physical Review B*, **2015**, 91,	3.3	15
32	Rechargeable Aluminium-Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. *Angewandte Chemie - International Edition*, **2020**, 59, 22963-22967	16.4	15
31	Bis(ethylenedithio)tetrathiafulvalene Charge-Transfer Salt Nanotube Arrays. *Advanced Materials*, **2006**, 18, 2753-2757	24	14
30	A Black Phosphorus□Graphite Composite Anode for Li-/Na-/K-Ion Batteries. *Angewandte Chemie*, **2020**, 132, 2338-2342	3.6	13
29	The Origin of Improved Electrical Double-Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. *Angewandte Chemie*, **2016**, 128, 14026-14031	3.6	12
28	Chemical Vapor Deposition Growth of Bernal-Stacked Bilayer Graphene by Edge-Selective Etching with H2O. *Chemistry of Materials*, **2018**, 30, 7852-7859	9.6	11
27	KOH assisted activation of microwave exfoliated graphite oxide for selective voltammetric determination of dopamine and uric acid in the presence of ascorbic acid. *Journal of Electroanalytical Chemistry*, **2017**, 804, 72-77	4.1	8
26	Monitoring the mechanical properties of the solid electrolyte interphase (SEI) using electrochemical quartz crystal microbalance with dissipation. *Chinese Chemical Letters*, **2021**, 32, 1139-1143	8.1	8
25	Graphene foil as a current collector for NCM material-based cathodes. *Nanotechnology*, **2020**, 31, 205710	3.4	7
24	Supercapacitors: A Hierarchical Carbon Derived from Sponge-Templated Activation of Graphene Oxide for High-Performance Supercapacitor Electrodes (Adv. Mater. 26/2016). *Advanced Materials*, **2016**, 28, 5331	24	7
23	Guiding Sodium Deposition through a Sodiophobic□Sodiophilic Gradient Interfacial Layer for Highly Stable Sodium Metal Anodes. *ACS Applied Energy Materials*, **2021**, 4, 2724-2731	6.1	7
22	Carbon Nanostructures: Covalently Connected Carbon Nanostructures for Current Collectors in Both the Cathode and Anode of Li□S Batteries (Adv. Mater. 41/2016). *Advanced Materials*, **2016**, 28, 9016-9016	24	5

21	Rechargeable Aluminium–Sulfur Battery with Improved Electrochemical Performance by Cobalt-Containing Electrocatalyst. *Angewandte Chemie*, **2020**, 132, 23163-23167	3.6	5
20	Highly pressure-sensitive graphene sponge fabricated by γ-ray irradiation reduction. *Science China Materials*, **2018**, 61, 1596-1604	7.1	5
19	Hot-Roll-Pressing Mediated Transfer of Chemical Vapor Deposition Graphene for Transparent and Flexible Touch Screen with Low Sheet-Resistance. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 4337-4342	1.3	4
18	Low-Cost Synthesis Route for High-Performance S/C Composite with 90% S Content. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2016**, 32, 797-799	3.8	4
17	Isolated Co single atoms in nitrogen-doped graphene for aluminum-sulfur batteries with enhanced kinetic response. *Journal of Energy Chemistry*, **2021**, 67, 354-354	12	4
16	Isotropic charge screening of anisotropic black phosphorus revealed by potassium adatoms. *Physical Review B*, **2019**, 100,	3.3	3
15	Fundamental Insights into Surface Modification of Silicon Material toward Improved Activity and Durability in Photocatalytic Hydrogen Production: A Case Study of Pre-Lithiation. *Journal of Physical Chemistry C*, **2021**, 125, 5542-5548	3.8	3
14	Cobalt and nitrogen atoms co-doped porous carbon for advanced electrical double-layer capacitors. *Chinese Chemical Letters*, **2021**, 32, 830-833	8.1	3
13	Azide Passivation of Black Phosphorus Nanosheets: Covalent Functionalization Affords Ambient Stability Enhancement. *Angewandte Chemie*, **2018**, 131, 1493	3.6	3
12	Role of the Metal Atom in a Carbon-Based Single-Atom Electrocatalyst for Li?S Redox Reactions.. *Small*, **2022**, e2200395	11	3
11	Phosphorus-Based Anodes for Fast Charging Lithium-Ion Batteries: Challenges and Opportunities. *Small Science*,2200015		3
10	γ-Ray Irradiation-Derived MnO/rGO Composites for High Performance Lithium Ion Batteries. *Chinese Journal of Chemical Physics*, **2017**, 30, 461-466	0.9	2
9	Ascorbic acid-assisted defect healing and stack ordering of graphene films towards high power thermal dispersion. *Carbon*, **2021**, 182, 799-805	10.4	2
8	Regulating Sodium Deposition through Gradiently-Graphitized Framework for Dendrite-Free Na Metal Anode.. *Small*, **2022**, e2107199	11	2
7	Highly sensitive flexible pressure sensors based on graphene/graphene scrolls multilayer hybrid films. *Chinese Journal of Chemical Physics*, **2020**, 33, 365-370	0.9	1
6	Identification of graphene oxide and its structural features in solvents by optical microscopy.. *RSC Advances*, **2019**, 9, 18559-18564	3.7	0
5	Ion transport in porous carbon electrode for supercapacitors probed by electrochemical quartz crystal microbalance. *Electrochimica Acta*, **2020**, 356, 136780	6.7	0
4	Supercapacitors: Vacuum Filtration-and-Transfer Technique Helps Electrochemical Quartz Crystal Microbalance to Reveal Accurate Charge Storage in Supercapacitors (Small Methods 11/2019). *Small Methods*, **2019**, 3, 1970037	12.8	0

3	Microfluidic Oxidation of Graphite in Two Minutes with Capability of Real-Time Monitoring.. *Advanced Materials*, **2022**, e2107083	24	0
2	Molecular sieve based Janus separators for Li-ions redistribution to enable stable lithium deposition. *Nano Research*,1	10	0
1	Elimination of Grain Boundaries in Graphene Growth on a Cu-Ni Alloyed Substrate by Chemical Vapor Deposition. *Journal of Physical Chemistry C*, **2021**, 125, 18217-18224	3.8	