Gang Huang

List of Publications by Citations

70 papers	2,858 citations	32 h-index	52 g-index
75 ext. papers	3,705 ext. citations	13 avg, IF	5.78 L-index

#	Paper	IF	Citations
70	Metal organic frameworks route to in situ insertion of multiwalled carbon nanotubes in Co3O4 polyhedra as anode materials for lithium-ion batteries. *ACS Nano*, **2015**, 9, 1592-9	16.7	410
69	Hierarchical NiFe2O4/Fe2O3 nanotubes derived from metal organic frameworks for superior lithium ion battery anodes. *Journal of Materials Chemistry A*, **2014**, 2, 8048-8053	13	203
68	Lithiophilic 3D Nanoporous Nitrogen-Doped Graphene for Dendrite-Free and Ultrahigh-Rate Lithium-Metal Anodes. *Advanced Materials*, **2019**, 31, e1805334	24	173
67	Metal-organic framework derived Fe2O3@NiCo2O4 porous nanocages as anode materials for Li-ion batteries. *Nanoscale*, **2014**, 6, 5509-15	7.7	147
66	RGO/Co 3 O 4 Composites Prepared Using GO-MOFs as Precursor for Advanced Lithium-ion Batteries and Supercapacitors Electrodes. *Electrochimica Acta*, **2016**, 215, 410-419	6.7	94
65	Phytic Acid-Assisted Formation of Hierarchical Porous CoP/C Nanoboxes for Enhanced Lithium Storage and Hydrogen Generation. *ACS Nano*, **2018**, 12, 12238-12246	16.7	90
64	Metal-Organic Framework Template Synthesis of NiCoS@C Encapsulated in Hollow Nitrogen-Doped Carbon Cubes with Enhanced Electrochemical Performance for Lithium Storage. *ACS Applied Materials & Interfaces*, **2017**, 9, 18178-18186	9.5	80
63	MXenes for Rechargeable Batteries Beyond the Lithium-Ion. *Advanced Materials*, **2021**, 33, e2004039	24	71
62	Hierarchical Porous Te@ZnCo2O4 Nanofibers Derived from Te@Metal-Organic Frameworks for Superior Lithium Storage Capability. *Advanced Functional Materials*, **2017**, 27, 1604941	15.6	66
61	In Situ Designing a Gradient Li Capture and Quasi-Spontaneous Diffusion Anode Protection Layer toward Long-Life Li-O Batteries. *Advanced Materials*, **2020**, 32, e2004157	24	62
60	FeS2@C nanowires derived from organic-inorganic hybrid nanowires for high-rate and long-life lithium-ion batteries. *Journal of Power Sources*, **2016**, 328, 56-64	8.9	62
59	Core-shell NiFe2O4@TiO2 nanorods: an anode material with enhanced electrochemical performance for lithium-ion batteries. *Chemistry - A European Journal*, **2014**, 20, 11214-9	4.8	58
58	Full Performance Nanoporous Graphene Based Li-O2 Batteries through Solution Phase Oxygen Reduction and Redox-Additive Mediated Li2O2 Oxidation. *Advanced Energy Materials*, **2017**, 7, 1601933	21.8	57
57	Low-Temperature Carbide-Mediated Growth of Bicontinuous Nitrogen-Doped Mesoporous Graphene as an Efficient Oxygen Reduction Electrocatalyst. *Advanced Materials*, **2018**, 30, e1803588	24	57
56	CuO Nanorod Arrays Formed Directly on Cu Foil from MOFs as Superior Binder-Free Anode Material for Lithium-Ion Batteries. *ACS Energy Letters*, **2017**, 2, 1564-1570	20.1	52
55	Coated/Sandwiched rGO/CoSx Composites Derived from Metal-Organic Frameworks/GO as Advanced Anode Materials for Lithium-Ion Batteries. *Chemistry - A European Journal*, **2016**, 22, 1467-74	4.8	51
54	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. *Angewandte Chemie - International Edition*, **2018**, 57, 13302-13307	16.4	51

53	Ultrastable Silicon Anode by Three-Dimensional Nanoarchitecture Design. *ACS Nano*, **2020**, 14, 4374-4382	16.7	49
52	Freestanding MnO2@carbon papers air electrodes for rechargeable Li-O2 batteries. *Journal of Power Sources*, **2014**, 261, 311-316	8.9	49
51	Controllable synthesis of cube-like ZnSnO3@TiO2 nanostructures as lithium ion battery anodes. *Journal of Materials Chemistry A*, **2015**, 3, 2985-2990	13	47
50	Direct Observations of the Formation and Redox-Mediator-Assisted Decomposition of Li O in a Liquid-Cell Li-O Microbattery by Scanning Transmission Electron Microscopy. *Advanced Materials*, **2017**, 29, 1702752	24	41
49	Facile synthesis of CuS/rGO composite with enhanced electrochemical lithium-storage properties through microwave-assisted hydrothermal method. *Electrochimica Acta*, **2016**, 203, 238-245	6.7	41
48	Solvothermal synthesis of GO/V2O5 composites as a cathode material for rechargeable magnesium batteries. *RSC Advances*, **2015**, 5, 76352-76355	3.7	40
47	Yolk@Shell or Concave Cubic NiO-CoO@C Nanocomposites Derived from Metal-Organic Frameworks for Advanced Lithium-Ion Battery Anodes. *Inorganic Chemistry*, **2017**, 56, 9794-9801	5.1	40
46	Hydrogenated Core□Shell MAX@K2Ti8O17 Pseudocapacitance with Ultrafast Sodium Storage and Long-Term Cycling. *Advanced Energy Materials*, **2017**, 7, 1700700	21.8	39
45	Operando Observations of SEI Film Evolution by Mass-Sensitive Scanning Transmission Electron Microscopy. *Advanced Energy Materials*, **2019**, 9, 1902675	21.8	39
44	Sulfur-impregnated core-shell hierarchical porous carbon for lithium-sulfur batteries. *Chemistry - A European Journal*, **2014**, 20, 17523-9	4.8	39
43	A renaissance of N,N-dimethylacetamide-based electrolytes to promote the cycling stability of Li□O2 batteries. *Energy and Environmental Science*, **2020**, 13, 3075-3081	35.4	39
42	The Stabilization Effect of CO in Lithium-Oxygen/CO Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 16661-16667	16.4	37
41	Operando observations of RuO2 catalyzed Li2O2 formation and decomposition in a Li-O2 micro-battery. *Nano Energy*, **2018**, 47, 427-433	17.1	34
40	A Core-Shell Fe/Fe2 O3 Nanowire as a High-Performance Anode Material for Lithium-Ion Batteries. *Chemistry - A European Journal*, **2016**, 22, 12081-7	4.8	33
39	Lithium-Air Batteries: Air-Electrochemistry and Anode Stabilization. *Accounts of Chemical Research*, **2021**, 54, 632-641	24.3	33
38	A general strategy for coating metal□organic frameworks on diverse components and architectures. *Journal of Materials Chemistry A*, **2016**, 4, 15106-15116	13	32
37	High-Capacity and Stable Li-O Batteries Enabled by a Trifunctional Soluble Redox Mediator. *Angewandte Chemie - International Edition*, **2020**, 59, 19311-19319	16.4	30
36	A Facile Molten-Salt Route for Large-Scale Synthesis of NiFe2O4 Nanoplates with Enhanced Lithium Storage Capability. *Chemistry - A European Journal*, **2015**, 21, 14140-5	4.8	29

35	Synthesis of Porous NiO Nanorods as High-Performance Anode Materials for Lithium-Ion Batteries. *Particle and Particle Systems Characterization*, **2016**, 33, 764-770	3.1	24
34	Graphene-based quasi-solid-state lithium–oxygen batteries with high energy efficiency and a long cycling lifetime. *NPG Asia Materials*, **2018**, 10, 1037-1045	10.3	24
33	Co-Solvent Electrolyte Engineering for Stable Anode-Free Zinc Metal Batteries.. *Journal of the American Chemical Society*, **2022**,	16.4	24
32	Metal organic frameworks route to prepare two-dimensional porous zinc-cobalt oxide plates as anode materials for lithium-ion batteries. *Journal of Power Sources*, **2018**, 396, 659-666	8.9	22
31	An Adjustable-Porosity Plastic Crystal Electrolyte Enables High-Performance All-Solid-State Lithium-Oxygen Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 9382-9387	16.4	21
30	Heterogeneous TiSiC@C-Containing NaTiO Architecture for High-Performance Sodium Storage at Elevated Temperatures. *ACS Nano*, **2017**, 11, 12219-12229	16.7	21
29	Hybrid solid electrolyte enabled dendrite-free Li anodes for high-performance quasi-solid-state lithium-oxygen batteries. *National Science Review*, **2021**, 8, nwaa150	10.8	20
28	Electrode Protection in High-Efficiency Li-O Batteries. *ACS Central Science*, **2020**, 6, 2136-2148	16.8	19
27	Nanosized FexNi2-xP embedded phosphorus-doped carbon nanorods with superior lithium storage performance. *Energy Storage Materials*, **2018**, 12, 103-109	19.4	17
26	Covalent Assembly of Two-Dimensional COF-on-MXene Heterostructures Enables Fast Charging Lithium Hosts. *Advanced Functional Materials*, **2021**, 31, 2101194	15.6	16
25	Enhanced electrochemical performance by a three-dimensional interconnected porous nitrogen-doped graphene/carbonized polypyrrole composite for lithium–sulfur batteries. *RSC Advances*, **2016**, 6, 26264-26270	3.7	15
24	Hydrated MgxV5O12 Cathode with Improved Mg2+ Storage Performance. *Advanced Energy Materials*, **2020**, 10, 2002128	21.8	13
23	Organic Acid Etching Strategy for Dendrite Suppression in Aqueous Zinc-Ion Batteries. *Advanced Energy Materials*,2102797	21.8	11
22	High-Capacity and Stable Li-O2 Batteries Enabled by a Trifunctional Soluble Redox Mediator. *Angewandte Chemie*, **2020**, 132, 19473-19481	3.6	11
21	Rational design of carbon anodes by catalytic pyrolysis of graphitic carbon nitride for efficient storage of Na and K mobile ions. *Nano Energy*, **2021**, 87, 106184	17.1	10
20	Interface between Lithium Metal and Garnet Electrolyte: Recent Progress and Perspective. *Batteries and Supercaps*, **2020**, 3, 1006-1015	5.6	9
19	Free-standing 3D nitrogen–carbon anchored Cu nanorod arrays: in situ derivation from a metal–organic framework and strategy to stabilize lithium metal anodes. *Journal of Materials Chemistry A*, **2020**, 8, 1425-1431	13	9
18	Preparation of a graphitic N-doped multi-walled carbon nanotube composite for lithium–sulfur batteries with long-life and high specific capacity. *RSC Advances*, **2016**, 6, 76568-76574	3.7	9

17	Efforts towards Practical and Sustainable Li/ Na-Air Batteries. *Chinese Journal of Chemistry*, **2021**, 39, 32-42	4.9	9
16	An SiO anode strengthened by the self-catalytic growth of carbon nanotubes. *Nanoscale*, **2021**, 13, 3808-3816	7.3	9
15	Synergetic Effect of Liquid and Solid Catalysts on the Energy Efficiency of Li-O Batteries: Cell Performances and Operando STEM Observations. *Nano Letters*, **2020**, 20, 2183-2190	11.5	8
14	Hydrogen Bond-Assisted Solution Discharge in Aprotic Li-O Battery.. *Advanced Materials*, **2022**, e2110416	24	8
13	General Growth of Carbon Nanotubes for Cerium Redox Reactions in High-Efficiency Redox Flow Batteries. *Research*, **2019**, 2019, 3616178	7.8	6
12	Efficient Na-Ion Storage in 2D TiS2 Formed by a Vapor Phase Anion-Exchange Process. *Small Methods*, **2020**, 4, 2000439	12.8	6
11	Soluble and Perfluorinated Polyelectrolyte for Safe and High-Performance Li-O Batteries.. *Angewandte Chemie - International Edition*, **2022**, e202116635	16.4	6
10	An Adjustable-Porosity Plastic Crystal Electrolyte Enables High-Performance All-Solid-State Lithium-Oxygen Batteries. *Angewandte Chemie*, **2020**, 132, 9468-9473	3.6	5
9	Zinc Oxide Quantum Dots Embedded Porous Carbon Nanosheets for High-Capacity and Ultrastable Lithium-Ion Battery Anodes. *Cell Reports Physical Science*, **2020**, 1, 100186	6.1	4
8	Fly Ash Carbon Anodes for Alkali Metal-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 26421-26430	9.5	3
7	3D Bimodal Porous Amorphous Carbon with Self-Similar Porosity by Low-Temperature Sequential Chemical Dealloying. *Chemistry of Materials*, **2021**, 33, 1013-1021	9.6	3
6	Rationally Designed CdS-Based Ternary Heterojunctions: A Case of 1T-MoS in CdS/TiO Photocatalyst. *Nanomaterials*, **2020**, 11,	5.4	2
5	In Situ Growth of Lithiophilic MOF Layer Enabling Dendrite-free Lithium Deposition. *IScience*, **2020**, 23, 101869	6.1	2
4	Two-Dimensional TiO2/TiS2 Hybrid Nanosheet Anodes for High-Rate Sodium-Ion Batteries. *ACS Applied Energy Materials*, **2021**, 4, 8721-8727	6.1	2
3	Identification of catalytic sites for cerium redox reactions in a metal-organic framework derived powerful electrocatalyst. *Energy Storage Materials*, **2020**, 32, 11-19	19.4	1
2	The Stabilization Effect of CO2 in Lithium–Oxygen/CO2 Batteries. *Angewandte Chemie*, **2020**, 132, 16804	3.6	
1	Suspended Hydrophilic Carbon Anodes to Enable Fully Flowable Cerium–Metal Hybrid Flow Batteries **2022**, 100004		