

Jian Wang

List of Publications by Year in descending order

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Version: 2024-02-01

43
papers

1,948
citations

236833

25
h-index

254106

43
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all docs

43
docs citations

43
times ranked

2254
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance graphdiyne-based electrochemical actuators. <i>Nature Communications</i> , 2018, 9, 752.	5.8	268
2	Single-atom catalyst boosts electrochemical conversion reactions in batteries. <i>Energy Storage Materials</i> , 2019, 18, 246-252.	9.5	203
3	Synthesis, Crystal Structure, and Electrochemical Properties of a Simple Magnesium Electrolyte for Magnesium/Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6406-6410.	7.2	106
4	Asymmetric gel polymer electrolyte with high lithium ion conductivity for dendrite-free lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8033-8040.	5.2	93
5	Single atomic cobalt catalyst significantly accelerates lithium ion diffusion in high mass loading Li ₂ S cathode. <i>Energy Storage Materials</i> , 2020, 28, 375-382.	9.5	92
6	Electrochemical Kinetic Modulators in Lithium-Sulfur Batteries: From Defect-Rich Catalysts to Single Atomic Catalysts. <i>Energy and Environmental Materials</i> , 2022, 5, 731-750.	7.3	89
7	Robust electrical "highway" network for high mass loading sulfur cathode. <i>Nano Energy</i> , 2017, 40, 390-398.	8.2	68
8	Lithiophilic V ₂ O ₅ nanobelt arrays decorated 3D framework hosts for highly stable composite lithium metal anodes. <i>Chemical Engineering Journal</i> , 2020, 384, 123313.	6.6	68
9	In Situ Self-Assembly of Ordered Organic/Inorganic Dual-Layered Interphase for Achieving Long-Life Dendrite-Free Li Metal Anodes in LiFSI-Based Electrolyte. <i>Advanced Functional Materials</i> , 2021, 31, 2007434.	7.8	65
10	Long-Life Dendrite-Free Lithium Metal Electrode Achieved by Constructing a Single Metal Atom Anchored in a Diffusion Modulator Layer. <i>Nano Letters</i> , 2021, 21, 3245-3253.	4.5	64
11	A high energy density Li ₂ S@C nanocomposite cathode with a nitrogen-doped carbon nanotube top current collector. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18913-18919.	5.2	55
12	915 nm Light-Triggered Photodynamic Therapy and MR/CT Dual-Modal Imaging of Tumor Based on the Nonstoichiometric Na _{0.52} YbF _{3.52} :Er Upconversion Nanoprobes. <i>Small</i> , 2016, 12, 4200-4210.	5.2	50
13	Conductive bridging effect of TiN nanoparticles on the electrochemical performance of TiN@CNT-S composite cathode. <i>Electrochimica Acta</i> , 2017, 250, 159-166.	2.6	49
14	Extending Cycle Life of Mg/S Battery by Activation of Mg Anode/Electrolyte Interface through an LiCl-Assisted MgCl ₂ Solubilization Mechanism. <i>Advanced Functional Materials</i> , 2020, 30, 1909370.	7.8	49
15	Simultaneous optimization of surface chemistry and pore morphology of 3D graphene-sulfur cathode via multi-ion modulation. <i>Journal of Power Sources</i> , 2016, 321, 193-200.	4.0	46
16	Single-Atomic Catalysts Embedded on Nanocarbon Supports for High Energy Density Lithium-Sulfur Batteries. <i>ChemSusChem</i> , 2020, 13, 3404-3411.	3.6	41
17	Anionic oxygen vacancies in Nb ₂ O ₅ -carbon hybrid host endow rapid catalytic behaviors for high-performance high areal loading lithium sulfur pouch cell. <i>Chemical Engineering Journal</i> , 2021, 417, 128172.	6.6	40
18	Synthesis, Crystal Structure, and Electrochemical Properties of a Simple Magnesium Electrolyte for Magnesium/Sulfur Batteries. <i>Angewandte Chemie</i> , 2016, 128, 6516-6520.	1.6	38

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19	Construction of Moisture-Stable Lithium Diffusion Controlling Layer toward High Performance Dendrite-Free Lithium Anode. <i>Advanced Functional Materials</i> , 2022, 32, 2110468.	7.8	32
20	Unraveling Shuttle Effect and Suppression Strategy in Lithium/Sulfur Cells by In Situ/Operando X-ray Absorption Spectroscopic Characterization. <i>Energy and Environmental Materials</i> , 2021, 4, 222-228.	7.3	31
21	Janus Electrolyte with Modified Li ⁺ Solvation for High-Performance Solid-State Lithium Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	30
22	High areal capacity flexible sulfur cathode based on multi-functionalized super-aligned carbon nanotubes. <i>Nano Research</i> , 2019, 12, 1105-1113.	5.8	28
23	Hierarchical Structure Formation and Effect Mechanism of Ni/Mn Layered Double Hydroxides Microspheres with Large-Scale Production for Flexible Asymmetric Supercapacitors. <i>ACS Applied Energy Materials</i> , 2018, 1, 2242-2253.	2.5	27
24	Hierarchical Sulfur-Doped Graphene Foam Embedded with Sn Nanoparticles for Superior Lithium Storage in LiFSI-Based Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30500-30507.	4.0	27
25	Multi-ion Modulated Single-Step Synthesis of a Nanocarbon Embedded with a Defect-Rich Nanoparticle Catalyst for a High Loading Sulfur Cathode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 12727-12735.	4.0	27
26	Confinement of sulfur species into heteroatom-doped, porous carbon container for high areal capacity cathode. <i>Chemical Engineering Journal</i> , 2019, 368, 340-349.	6.6	26
27	Tuning 4f-Center Electron Structure by Schottky Defects for Catalyzing Li Diffusion to Achieve Long-Term Dendrite-Free Lithium Metal Battery. <i>Advanced Science</i> , 2022, 9, .	5.6	24
28	Iron vacancies and surface modulation of iron disulfide nanoflowers as a high power/energy density cathode for ultralong-life stable Li storage. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14769-14777.	5.2	23
29	Improved cycling stability of the capping agent-free nanocrystalline FeS ₂ cathode via an upper cut-off voltage control. <i>Journal of Materials Science</i> , 2017, 52, 2442-2451.	1.7	20
30	<i>In situ</i> -grown tungsten carbide nanoparticles on nanocarbon as an electrocatalyst to promote the redox reaction kinetics of high-mass loading sulfur cathode for high volumetric performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22240-22250.	5.2	19
31	Interfacial lithium-nitrogen bond catalyzes sulfide oxidation reactions in high-loading Li ₂ S cathode. <i>Chemical Engineering Journal</i> , 2022, 429, 132352.	6.6	18
32	Progress of Lithium/Sulfur Batteries Based on Chemically Modified Carbon. <i>Wuli Huaxue Xuebao/ Acta Physico-Chimica Sinica</i> , 2017, 33, 165-182.	2.2	15
33	Highly charged hydrogel with enhanced donnan exclusion toward ammonium for efficient solar-driven water remediation. <i>Chemical Engineering Journal</i> , 2022, 430, 133019.	6.6	15
34	Coupling Niobia Nanorods with a Multicomponent Carbon Network for High Power Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 44196-44203.	4.0	14
35	Advances and Prospects of 2D Graphene-Based Materials/Hybrids for Lithium Metal-Sulfur Full Battery: From Intrinsic Property to Catalysis Modification. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	14
36	Robust interfacial engineering construction to alleviate polysulfide shuttling in metal sulfide electrodes for achieving Fast-charge High-capacity lithium storages. <i>Chemical Engineering Journal</i> , 2022, 446, 137291.	6.6	13

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37	Optimizations of Graphitic Carbon/Silicon Hybrids for Scalable Preparation with High-Performance Lithium-Ion Storage. ACS Sustainable Chemistry and Engineering, 2022, 10, 5590-5598.	3.2	12
38	Redox-induced reversible luminescence switching of cerium-doped upconversion nanoparticles. Journal of Luminescence, 2016, 173, 66-72.	1.5	11
39	Synergistic Catalytic Effect of Ion Tunnels with Polar Dopants to Boost the Electrochemical Kinetics for High-Performance Sulfur Cathodes. ChemElectroChem, 2019, 6, 5051-5059.	1.7	11
40	Flow Alters the Interfacial Reactions of Upconversion Nanocrystals Probed by In Situ Sum Frequency Generation. Advanced Materials Interfaces, 2020, 7, 1902046.	1.9	11
41	Combined <i>In Situ</i> Spectroscopies Reveal the Ligand Ordering-Modulated Photoluminescence of Upconverting Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 23086-23093.	1.5	6
42	High-performance Oxygen Evolution Catalyst Enabled by Interfacial Effect between CeO ₂ and FeNi Metal-organic Framework. Acta Chimica Sinica, 2020, 78, 355.	0.5	6
43	Fe ³⁺ -codoped ultra-small NaGdF ₄ :Nd ³⁺ nanophosphors: enhanced near-infrared luminescence, reduced particle size and bioimaging applications. RSC Advances, 2019, 9, 18070-18075.	1.7	4