

Jie Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5731798/publications.pdf>

Version: 2024-02-01

50
papers

4,221
citations

145106

33
h-index

214428

50
g-index

50
all docs

50
docs citations

50
times ranked

5791
citing authors

#	ARTICLE	IF	CITATIONS
1	Interfacial Microextraction Boosting Nitrogen Feed for Efficient Ambient Ammonia Synthesis in Aqueous Electrolyte. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	41
2	Processing robust lithium metal anode for high-security batteries: A minireview. <i>Energy Storage Materials</i> , 2022, 47, 122-133.	9.5	28
3	Eliminating Stubborn Insulated Deposition by Coordination Effect to Boost Zn Electrode Reversibility in Aqueous Electrolyte. <i>Frontiers in Chemistry</i> , 2022, 10, 851973.	1.8	4
4	Surpassing the Redox Potential Limit of Organic Cathode Materials via Extended π -Conjugation of Dioxin. <i>Nano Letters</i> , 2022, 22, 3473-3479.	4.5	14
5	Suppressing Surface Lattice Oxygen Evolution by Fluorinated Graphene-Scaffolded Lithium-Rich Manganese-Based Cathode for Enhanced Stability. <i>Energy Storage Materials</i> , 2022, 49, 555-563.	9.5	10
6	Rapid leakage responsive and self-healing Li-metal batteries. <i>Chemical Engineering Journal</i> , 2021, 404, 126470.	6.6	26
7	Functional-selected LiF-intercalated-graphene enabling ultra-stable lithium sulfur battery. <i>Journal of Energy Chemistry</i> , 2021, 58, 78-84.	7.1	17
8	All-Liquid-Phase Reaction Mechanism Enabling Cryogenic Li-S Batteries. <i>ACS Nano</i> , 2021, 15, 13847-13856.	7.3	55
9	Single lithium-ion channel polymer binder for stabilizing sulfur cathodes. <i>National Science Review</i> , 2020, 7, 315-323.	4.6	43
10	Dendrite-free and Ultra-High energy lithium sulfur battery enabled by dimethyl polysulfide intermediates. <i>Energy Storage Materials</i> , 2020, 24, 265-271.	9.5	26
11	Super lithiophilic SEI derived from quinones electrolyte to guide Li uniform deposition. <i>Energy Storage Materials</i> , 2020, 24, 426-431.	9.5	34
12	Lithium dendrite inhibition via 3D porous lithium metal anode accompanied by inherent SEI layer. <i>Energy Storage Materials</i> , 2020, 26, 385-390.	9.5	52
13	Identifying the Lewis Base Chemistry in Preventing the Deposition of Metal Oxides on Ketone-Enriched Carbon Cathodes for Highly Durable Metal-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 3603-3609.	4.0	9
14	Pyridinic and graphitic nitrogen-enriched carbon paper as a highly active bifunctional catalyst for Zn-air batteries. <i>Electrochimica Acta</i> , 2020, 334, 135562.	2.6	45
15	Artificial Lithium Isopropyl-Sulfide Macromolecules as an Ion-Selective Interface for Long-Life Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54537-54544.	4.0	49
16	Atomic Metal Vacancy Modulation of Single-Atom Dispersed Co/N/C for Highly Efficient and Stable Air Cathode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 15298-15304.	4.0	33
17	Single-atom scale metal vacancy engineering in heteroatom-doped carbon for rechargeable zinc-air battery with reduced overpotential. <i>Chemical Engineering Journal</i> , 2020, 393, 124702.	6.6	43
18	Unveiling the Essential Nature of Lewis Basicity in Thermodynamically and Dynamically Promoted Nitrogen Fixation. <i>Advanced Functional Materials</i> , 2020, 30, 2001244.	7.8	49

#	ARTICLE	IF	CITATIONS
19	In-situ observation as activity descriptor enables rational design of oxygen reduction catalyst for zinc-air battery. <i>Energy Storage Materials</i> , 2020, 27, 226-231.	9.5	42
20	Wiping off oxygen bonding to maximize heteroatom-induced improvement in oxygen reaction activity of metal site for high-performance zinc-air battery. <i>Nanotechnology</i> , 2020, 31, 195403.	1.3	1
21	Multifunctional Cellulose Nanocrystals as a High-Efficient Polysulfide Stopper for Practical Li-S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17592-17601.	4.0	22
22	Toward safer solid-state lithium metal batteries: a review. <i>Nanoscale Advances</i> , 2020, 2, 1828-1836.	2.2	50
23	Enhanced utilization of active sites of Fe/N/C catalysts by pore-in-pore structures for ultrahigh mass activity. <i>Nanotechnology</i> , 2020, 31, 315401.	1.3	6
24	Strongly trapping soluble lithium polysulfides using polar cysteamine groups for highly stable lithium sulfur batteries. <i>Nanotechnology</i> , 2020, 31, 485403.	1.3	4
25	High Coulombic efficiency cathode with nitril grafted sulfur for Li-S battery. <i>Energy Storage Materials</i> , 2019, 17, 260-265.	9.5	35
26	Single-Atom Iron as Lithiophilic Site To Minimize Lithium Nucleation Overpotential for Stable Lithium Metal Full Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 32008-32014.	4.0	64
27	A New Type of Electrolyte System To Suppress Polysulfide Dissolution for Lithium-Sulfur Battery. <i>ACS Nano</i> , 2019, 13, 9067-9073.	7.3	69
28	Nonflammable and High-Voltage-Tolerated Polymer Electrolyte Achieving High Stability and Safety in 4.9 V-Class Lithium Metal Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45048-45056.	4.0	73
29	Facilitating nitrogen accessibility to boron-rich covalent organic frameworks via electrochemical excitation for efficient nitrogen fixation. <i>Nature Communications</i> , 2019, 10, 3898.	5.8	191
30	Stabilizing cathodes of lithium-sulfur batteries by the chemical binding of sulfur and their discharge products to carbon nanofibers. <i>New Journal of Chemistry</i> , 2019, 43, 15267-15274.	1.4	7
31	Over 56.55% Faradaic efficiency of ambient ammonia synthesis enabled by positively shifting the reaction potential. <i>Nature Communications</i> , 2019, 10, 341.	5.8	412
32	A new high ionic conductive gel polymer electrolyte enables highly stable quasi-solid-state lithium sulfur battery. <i>Energy Storage Materials</i> , 2019, 22, 256-264.	9.5	89
33	Selenium-Doped Carbon Nanosheets with Strong Electron Cloud Delocalization for Nondeposition of Metal Oxides on Air Cathode of Zinc-Air Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 20056-20063.	4.0	46
34	High-Safety All-Solid-State Lithium-Metal Battery with High-Ionic-Conductivity Thermoresponsive Solid Polymer Electrolyte. <i>Nano Letters</i> , 2019, 19, 3066-3073.	4.5	108
35	Lithium anode stable in air for low-cost fabrication of a dendrite-free lithium battery. <i>Nature Communications</i> , 2019, 10, 900.	5.8	297
36	Anion-regulated solid polymer electrolyte enhances the stable deposition of lithium ion for lithium metal batteries. <i>Journal of Power Sources</i> , 2019, 417, 70-75.	4.0	60

#	ARTICLE	IF	CITATIONS
37	A functional-gradient-structured ultrahigh modulus solid polymer electrolyte for all-solid-state lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24477-24485.	5.2	51
38	High Lithium Ion Conductivity LiF/GO Solid Electrolyte Interphase Inhibiting the Shuttle of Lithium Polysulfides in Long-Life Li-S Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1706513.	7.8	109
39	A New Hydrophilic Binder Enabling Strongly Anchoring Polysulfides for High-Performance Sulfur Electrodes in Lithium-Sulfur Battery. <i>Advanced Energy Materials</i> , 2018, 8, 1702889.	10.2	270
40	Progress and perspective of organosulfur polymers as cathode materials for advanced lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2018, 15, 53-64.	9.5	131
41	Use of Tween Polymer To Enhance the Compatibility of the Li/Electrolyte Interface for the High-Performance and High-Safety Quasi-Solid-State Lithium-Sulfur Battery. <i>Nano Letters</i> , 2018, 18, 4598-4605.	4.5	81
42	Greatly Improved Conductivity of Double-Chain Polymer Network Binder for High Sulfur Loading Lithium-Sulfur Batteries with a Low Electrolyte/Sulfur Ratio. <i>Small</i> , 2018, 14, e1801536.	5.2	47
43	Bioinspired Polysulfiphobic Artificial Interphase Layer on Lithium Metal Anodes for Lithium Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30058-30064.	4.0	49
44	Facilitated Oxygen Chemisorption in Heteroatom-Doped Carbon for Improved Oxygen Reaction Activity in All-Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , 2018, 30, 1704898.	11.1	135
45	A New Type of Multifunctional Polar Binder: Toward Practical Application of High Energy Lithium Sulfur Batteries. <i>Advanced Materials</i> , 2017, 29, 1605160.	11.1	284
46	Greatly Suppressed Shuttle Effect for Improved Lithium Sulfur Battery Performance through Short Chain Intermediates. <i>Nano Letters</i> , 2017, 17, 538-543.	4.5	271
47	Stabilized Lithium-Sulfur Batteries by Covalently Binding Sulfur onto the Thiol-Terminated Polymeric Matrices. <i>Small</i> , 2017, 13, 1702104.	5.2	34
48	High coulombic efficiency and high-rate capability lithium sulfur batteries with low-solubility lithium polysulfides by using alkylene radicals to covalently connect sulfur. <i>Nano Energy</i> , 2017, 41, 758-764.	8.2	37
49	Self-Templated Formation of Interlaced Carbon Nanotubes Threaded Hollow Co ₃ S ₄ Nanoboxes for High-Rate and Heat-Resistant Lithium-Sulfur Batteries. <i>Journal of the American Chemical Society</i> , 2017, 139, 12710-12715.	6.6	456
50	Molecularly Imprinted Polymer Enables High-Efficiency Recognition and Trapping Lithium Polysulfides for Stable Lithium Sulfur Battery. <i>Nano Letters</i> , 2017, 17, 5064-5070.	4.5	112