Jia Xie

List of Publications by Year in descending order

105 papers	6,725 citations	93792 39 h-index	73587 79 g-index
111 all docs	111 docs citations	111 times ranked	8412 citing authors

#	Article	IF	Citations
1	Tuning Solid Interfaces via Varying Electrolyte Distributions Enables Highâ€Performance Solidâ€State Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	36
2	Dualâ€Functional Organotelluride Additive for Highly Efficient Sulfur Redox Kinetics and Lithium Regulation in Lithiumâ€“Sulfur Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	20
3	<scp>Anionâ€Regulated Weakly Solvating</scp> Electrolytes for <scp>Highâ€Voltage</scp> Lithium Metal Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	17
4	Revealing milling durations and sintering temperatures on conductivity and battery performances of Li2.25Zr0.75Fe0.25Cl6 electrolyte. Chinese Chemical Letters, 2023, 34, 107544.	4.8	6
5	Improvement of stability and solid-state battery performances of annealed 70Li2Sâ€“30P2S5 electrolytes by additives. Rare Metals, 2022, 41, 106-114.	3.6	38
6	Synthetic optimization and application of Li-argyrodite Li6PS5I in solid-state battery at different temperatures. Rare Metals, 2022, 41, 798-805.	3.6	18
7	A model cathode for mechanistic study of organosulfide electrochemistry in Li-organosulfide batteries. Journal of Energy Chemistry, 2022, 66, 440-447.	7.1	15
8	Preparation of SiO @TiO2@N-doped carbon composite using chitin as carbon precursor for high-performance lithium storage. Journal of Alloys and Compounds, 2022, 891, 162076.	2.8	11
9	Chlorine-rich lithium argyrodite enabling solid-state batteries with capabilities of high voltage, high rate, low-temperature and ultralong cyclability. Chemical Engineering Journal, 2022, 430, 132896.	6.6	71
10	Tuning ionic conductivity to enable all-climate solid-state Liâ€“S batteries with superior performances. Materials Advances, 2022, 3, 1047-1054.	2.6	15
11	Low concentration electrolyte with non-solvating cosolvent enabling high-voltage lithium metal batteries. IScience, 2022, 25, 103490.	1.9	17
12	Unraveling the crystallinity on battery performances of chlorine-rich argyrodite electrolytes. Journal of Power Sources, 2022, 520, 230890.	4.0	24
13	Scalable fabrication of solid-state batteries through high-energy electronic beam. Chemical Engineering Journal, 2022, 431, 134323.	6.6	19
14	Iodine-rich lithium argyrodite with enhanced ionic conductivity for solid-state batteries. Scripta Materialia, 2022, 210, 114475.	2.6	11
15	Enhancing Moisture and Electrochemical Stability of the Li_{5.5}PS_{4.5}Cl_{1.5} Electrolyte by Oxygen Doping. ACS Applied Materials & Interfaces, 2022, 14, 4179-4185.	4.0	44
16	Diluted Highâ€Concentration Electrolyte Based on Phosphate for Highâ€Performance Lithiumâ€Metal Batteries. Batteries and Supercaps, 2022, 5, .	2.4	12
17	Enhanced homogeneity of electrochemical reaction via low tortuosity enabling high-voltage nickel-rich layered oxide thick-electrode. Energy Storage Materials, 2022, 46, 443-451.	9.5	23
18	Fluorobenzene diluted low-density electrolyte for high-energy density and high-performance lithium-sulfur batteries. Journal of Energy Chemistry, 2022, 68, 752-761.	7.1	19

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19	Achieving superior ionic conductivity of Li6PS5I via introducing LiCl. Solid State Ionics, 2022, 377, 115871.	1.3	12
20	Enhancing the Reversibility of Lithium Cobalt Oxide Phase Transition in Thick Electrode via Low Tortuosity Design. Nano Letters, 2022, 22, 2429-2436.	4.5	20
21	Unraveling the Conversion Evolution on Solidâ€State Naâ€“SeS₂ Battery via In Situ TEM. Advanced Science, 2022, 9, e2200744.	5.6	25
22	Electrospun Sulfurized Polyacrylonitrile Nanofibers for Long-Term Cycling Stability and High-Rate Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2022, 5, 5212-5218.	2.5	13
23	1,3,5-Trifluorobenzene and fluorobenzene co-assisted electrolyte with thermodynamic and interfacial stabilities for high-voltage lithium metal battery. Energy Storage Materials, 2022, 48, 393-402.	9.5	34
24	Non-flammable fluorobenzene-diluted highly concentrated electrolytes enable high-performance Li-metal and Li-ion batteries. Journal of Colloid and Interface Science, 2022, 619, 399-406.	5.0	12
25	Enabling ultrafast lithium-ion conductivity of Li2ZrCl6 by indium doping. Chinese Chemical Letters, 2022, 33, 4635-4639.	4.8	33
26	Low Tortuosity and Reinforced Concrete Type Ultraâ€Thick Electrode for Practical Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	7.8	33
27	Constructing Highâ€Performance Quasiâ€Solidâ€State Sulfur Cathodes via the Cooperation of Solid Electrolyte Interface and Selenium Doping. ChemElectroChem, 2022, 9, .	1.7	1
28	Engineering high conductive Li7P2S8I via Cl- doping for all-solid-state Li-S batteries workable at different operating temperatures. Chemical Engineering Journal, 2022, 442, 136346.	6.6	21
29	In situ prepared â€œpolymer-in-saltâ€•electrolytes enabling high-voltage lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 11732-11741.	5.2	21
30	High-rate sodium metal batteries enabled by trifluormethylfullerene additive. Nano Research, 2022, 15, 7172-7179.	5.8	13
31	High-performance prelithiated Si-S full cell enabled by trifluorobenzene modified diluted high-concentration electrolyte. Materials Today Energy, 2022, 28, 101069.	2.5	1
32	Fullerenes for rechargeable battery applications: Recent developments and future perspectives. Journal of Energy Chemistry, 2021, 55, 70-79.	7.1	54
33	Fluorobenzene, A Lowâ€Density, Economical, and Bifunctional Hydrocarbon Cosolvent for Practical Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, .	7.8	121
34	Chalcogenide-based inorganic sodium solid electrolytes. Journal of Materials Chemistry A, 2021, 9, 5134-5148.	5.2	23
35	An organodiselenide containing electrolyte enables sulfurized polyacrylonitrile cathodes with fast redox kinetics in Liâ€“S batteries. Chemical Communications, 2021, 57, 9688-9691.	2.2	8
36	Nanophase-Separated, Elastic Epoxy Composite Thin Film as an Electrolyte for Stable Lithium Metal Batteries. Nano Letters, 2021, 21, 3611-3618.	4.5	47

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37	Diluted High Concentration Electrolyte with Dual Effects for Practical Lithium-Sulfur Batteries. Energy Storage Materials, 2021, 36, 333-340.	9.5	66
38	Ultrathin polymer electrolyte film prepared by in situ polymerization for lithium metal batteries. Materials Today Energy, 2021, 21, 100785.	2.5	25
39	In Situ Characterization of Over-Lithiation of Organosulfide-Based Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 41555-41562.	4.0	9
40	Exchange of Li and AgNO₃ Enabling Stable 3D Lithium Metal Anodes with Embedded Lithophilic Nanoparticles and a Solid Electrolyte Interphase Inducer. ACS Applied Materials & Interfaces, 2021, 13, 38425-38431.	4.0	10
41	Dual-confined SiO encapsulated in PVA derived carbon layer and chitin derived N-doped carbon nanosheets for high-performance lithium storage. Chemical Engineering Journal, 2021, 420, 129754.	6.6	24
42	Fluorobenzene-based diluted highly concentrated carbonate electrolyte for practical high-voltage lithium metal batteries. Journal of Power Sources, 2021, 506, 230086.	4.0	20
43	Nitrofullerene as an electrolyte-compatible additive for high-performance sodium metal batteries. Nano Energy, 2021, 89, 106396.	8.2	33
44	LiNbO3-coated LiNi0.7Co0.1Mn0.2O2 and chlorine-rich argyrodite enabling high-performance solid-state batteries under different temperatures. Energy Storage Materials, 2021, 43, 53-61.	9.5	120
45	Challenges and key parameters in exploring the cyclability limitation of practical lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 24215-24240.	5.2	53
46	Unveiling low-tortuous effect on electrochemical performance toward ultrathick LiFePO4 electrode with 100ÂmgÂcmâ¯2 area loading. Journal of Power Sources, 2021, 515, 230588.	4.0	22
47	Li4-Sb Sn1-S4 solid solutions for air-stable solid electrolytes. Journal of Energy Chemistry, 2020, 41, 171-176.	7.1	75
48	Enhancing ionic conductivity of solid electrolyte by lithium substitution in halogenated Li-Argyrodite. Journal of Power Sources, 2020, 450, 227601.	4.0	58
49	Dual Play of Chitinâ€Derived Nâ€Doped Carbon Nanosheets Enabling Highâ€Performance Naâ€Se₂ Half/Full Cells. Batteries and Supercaps, 2020, 3, 165-173.	2.4	16
50	Na3.8[Sn0.67Si0.33]0.8Sb0.2S4: A quinary sodium fast ionic conductor for all-solid-state sodium battery. Journal of Energy Chemistry, 2020, 48, 102-106.	7.1	17
51	Facile preparation of a stable 3D host for lithium metal anodes. Chemical Communications, 2020, 56, 9898-9900.	2.2	17
52	Reconfiguring Organosulfur Cathode by Over-Lithiation to Enable Ultrathick Lithium Metal Anode toward Practical Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 13784-13793.	7.3	62
53	Micron-sized SiO_x/N-doped carbon composite spheres fabricated with biomass chitosan for high-performance lithium-ion battery anodes. RSC Advances, 2020, 10, 38524-38531.	1.7	13
54	Insight into sulfur-rich selenium sulfide/pyrolyzed polyacrylonitrile cathodes for Liâ€“S batteries. Sustainable Energy and Fuels, 2020, 4, 3588-3596.	2.5	12

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55	Elevating reactivity and cyclability of all-solid-state lithium-sulfur batteries by the combination of tellurium-doping and surface coating. Nano Energy, 2020, 76, 105083.	8.2	52
56	Selenium or Tellurium as Eutectic Accelerators for High-Performance Lithium/Sodiumâ€“Sulfur Batteries. Electrochemical Energy Reviews, 2020, 3, 613-642.	13.1	75
57	Zinc bis(2â€“ethylhexanoate), a homogeneous and bifunctional additive, to improve conductivity and lithium deposition for poly (ethylene oxide) based all-solid-state lithium metal battery. Journal of Power Sources, 2020, 451, 227730.	4.0	33
58	Enhancing the kinetics of lithiumâ€“sulfur batteries under solid-state conversion by using tellurium as a eutectic accelerator. Journal of Materials Chemistry A, 2020, 8, 3405-3412.	5.2	28
59	Effect of Halogen Doping in Sodium Solid Electrolytes Based on the Naâ€“Snâ€“Siâ€“Pâ€“S Quinary System. Chemistry of Materials, 2020, 32, 4065-4071.	3.2	15
60	Material and Interfacial Modification toward a Stable Room-Temperature Solid-State Naâ€“S Battery. ACS Applied Materials & Interfaces, 2020, 12, 20563-20569.	4.0	33
61	(Invited) Chemical Manipulation for High Performance Li-S Battery. ECS Meeting Abstracts, 2020, MA2020-01, 159-159.	0.0	0
62	Facile synthesis and electrochemical properties of Na-rich anti-perovskite solid electrolytes. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228201-228201.	0.2	2
63	Bifunctional Additive with Smoothing and Protecting Effects for Stable Lithium Metal Anode. ECS Meeting Abstracts, 2020, MA2020-02, 3532-3532.	0.0	0
64	Chemical Manipulation Towards High Performance Li-S Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 362-362.	0.0	0
65	Electrolyte Modification and Its Application for High Performance Li Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 723-723.	0.0	0
66	Nitrofullerene, a C₆₀-based Bifunctional Additive with Smoothing and Protecting Effects for Stable Lithium Metal Anode. Nano Letters, 2019, 19, 8780-8786.	4.5	83
67	Design and synthesis of room temperature stable Li-argyrodite superionic conductors via cation doping. Journal of Materials Chemistry A, 2019, 7, 2717-2722.	5.2	54
68	2D ultrathin carbon nanosheets with rich N/O content constructed by stripping bulk chitin for high-performance sodium ion batteries. Nanoscale, 2019, 11, 12626-12636.	2.8	53
69	Facile Generation of Polymerâ€“Alloy Hybrid Layers for Dendriteâ€Free Lithiumâ€Metal Anodes with Improved Moisture Stability. Angewandte Chemie, 2019, 131, 11496-11500.	1.6	13
70	Facile Generation of Polymerâ€“Alloy Hybrid Layers for Dendriteâ€Free Lithiumâ€Metal Anodes with Improved Moisture Stability. Angewandte Chemie - International Edition, 2019, 58, 11374-11378.	7.2	167
71	Effect of eutectic accelerator in selenium-doped sulfurized polyacrylonitrile for high performance room temperature sodiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 12732-12739.	5.2	78
72	Group 14 element based sodium chalcogenide Na4Sn0.67Si0.33S4 as structure template for exploring sodium superionic conductors. Energy Storage Materials, 2019, 23, 508-513.	9.5	26

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73	Manipulating kinetics of sulfurized polyacrylonitrile with tellurium as eutectic accelerator to prevent polysulfide dissolution in lithium-sulfur battery under dissolution-deposition mechanism. Nano Energy, 2019, 60, 153-161.	8.2	103
74	Ether-compatible sulfurized polyacrylonitrile cathode with excellent performance enabled by fast kinetics via selenium doping. Nature Communications, 2019, 10, 1021.	5.8	211
75	Rotational Cluster Anion Enabling Superionic Conductivity in Sodium-Rich Antiperovskite Na₃OBH₄. Journal of the American Chemical Society, 2019, 141, 5640-5644.	6.6	97
76	High Performance Room Temperature Sodiumâ€“Sulfur Battery by Eutectic Acceleration in Tellurium-Doped Sulfurized Polyacrylonitrile. ACS Applied Energy Materials, 2019, 2, 2956-2964.	2.5	73
77	Cobalt-embedded carbon nanofiber as electrocatalyst for polysulfide redox reaction in lithium sulfur batteries. Electrochimica Acta, 2019, 304, 11-19.	2.6	57
78	Se as eutectic accelerator in sulfurized polyacrylonitrile for high performance all-solid-state lithium-sulfur battery. Energy Storage Materials, 2019, 21, 287-296.	9.5	93
79	Facile synthesis of Li2S@C composites as cathode for Liâ€“S batteries. Journal of Energy Chemistry, 2019, 37, 111-116.	7.1	33
80	Scalable and Sustainable Approach toward Highly Compressible, Anisotropic, Lamellar Carbon Sponge. CheM, 2018, 4, 544-554.	5.8	246
81	Direct synthesis of Al2O3-modified Li(Ni0.5Co0.2Mn0.3)O2 cathode materials for lithium ion batteries. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 97-101.	0.4	3
82	Free-Standing Mn₃O₄@CNF/S Paper Cathodes with High Sulfur Loading for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 13406-13412.	4.0	68
83	Electrocatalytic activity of lithium polysulfides adsorbed into porous TiO2 coated MWCNTs hybrid structure for lithium-sulfur batteries. Scientific Reports, 2017, 7, 40679.	1.6	26
84	All-wood, low tortuosity, aqueous, biodegradable supercapacitors with ultra-high capacitance. Energy and Environmental Science, 2017, 10, 538-545.	15.6	602
85	Lamellar mesoporous carbon derived from bagasse for the cathode materials of lithiumâ€“sulfur batteries. RSC Advances, 2017, 7, 13595-13603.	1.7	10
86	Granadilla-Inspired Structure Design for Conversion/Alloy-Reaction Electrode with Integrated Lithium Storage Behaviors. ACS Applied Materials & Interfaces, 2017, 9, 15470-15476.	4.0	11
87	Highly Conductive, Lightweight, Lowâ€Tortuosity Carbon Frameworks as Ultrathick 3D Current Collectors. Advanced Energy Materials, 2017, 7, 1700595.	10.2	210
88	Facile synthesis of mesoporous graphene platelets with in situ nitrogen and sulfur doping for lithiumâ€“sulfur batteries. RSC Advances, 2017, 7, 22567-22577.	1.7	20
89	Nitrogen-rich hard carbon as a highly durable anode for high-power potassium-ion batteries. Energy Storage Materials, 2017, 8, 161-168.	9.5	408
90	Highly Flexible and Efficient Solar Steam Generation Device. Advanced Materials, 2017, 29, 1701756.	11.1	584

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91	Hierarchical nitrogen-doped porous graphene/reduced fluorographene/sulfur hybrids for high-performance lithiumâ€“sulfur batteries. Physical Chemistry Chemical Physics, 2017, 19, 2567-2573.	1.3	22
92	A Hierarchical N/Sâ€Codoped Carbon Anode Fabricated Facilely from Cellulose/Polyaniline Microspheres for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1501929.	10.2	460
93	Integrated Intercalationâ€Based and Interfacial Sodium Storage in Grapheneâ€Wrapped Porous Li₄Ti₅O₁₂ Nanofibers Composite Aerogel. Advanced Energy Materials, 2016, 6, 1600322.	10.2	141
94	Au@CdS Coreâ€“Shell Nanoparticlesâ€Modified ZnO Nanowires Photoanode for Efficient Photoelectrochemical Water Splitting. Advanced Science, 2015, 2, 1500135.	5.6	77
95	Performance improvement and failure mechanism of LiNi_{0.5}Mn_{1.5}O₄/graphite cells with biphenyl additive. Physical Chemistry Chemical Physics, 2014, 16, 24373-24381.	1.3	22
96	Synthesis and properties of optimized LiFePO4/C by a CVD-assisted two-step coating method. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	12
97	Mechanism and kinetic studies on the synthesis of LiFePO4via solid-state reactions. CrystEngComm, 2013, 15, 10648.	1.3	13
98	The Palladium Catalyzed Asymmetric Addition of Oxindoles and Allenes: An Atom-Economical Versatile Method for the Construction of Chiral Indole Alkaloids. Journal of the American Chemical Society, 2011, 133, 20611-20622.	6.6	234
99	Stereoselective, Dual-Mode Ruthenium-Catalyzed Ring Expansion of Alkynylcyclopropanols. Journal of the American Chemical Society, 2008, 130, 17258-17259.	6.6	82
100	Palladium-Catalyzed Diastereo- and Enantioselective Wagnerâ^'Meerwein Shift: Control of Absolute Stereochemistry in the Câ^'C Bond Migration Event. Journal of the American Chemical Society, 2008, 130, 6231-6242.	6.6	104
101	Palladium-Catalyzed Asymmetric Ring Expansion of Allenylcyclobutanols:Â An Asymmetric Wagnerâ^'Meerwein Shift. Journal of the American Chemical Society, 2006, 128, 6044-6045.	6.6	119
102	Ultrafast Carbon-Carbon Single-Bond Rotational Isomerization in Room-Temperature Solution. Science, 2006, 313, 1951-1955.	6.0	194
103	Enantioselective Palladium-Catalyzed Addition of 1,3-Dicarbonyl Compounds to an Allene Derivative. Chemistry - A European Journal, 2005, 11, 7075-7082.	1.7	80
104	Accidental vibrational degeneracy in vibrational excited states observed with ultrafast two-dimensional IR vibrational echo spectroscopy. Journal of Chemical Physics, 2005, 123, 164301.	1.2	13
105	Fluorescence Emission and Absorption Spectra of Single Anabaena sp. Strain PCC7120 CellsÂ¶. Photochemistry and Photobiology, 2002, 76, 310.	1.3	22