Jia Xie

List of Publications by Year in descending order

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105 papers	6,725 citations	81900 39 h-index	64796 79 g-index
111 all docs	111 docs citations	111 times ranked	7316 citing authors

#	Article	IF	Citations
1	All-wood, low tortuosity, aqueous, biodegradable supercapacitors with ultra-high capacitance. Energy and Environmental Science, 2017, 10, 538-545.	30.8	602
2	Highly Flexible and Efficient Solar Steam Generation Device. Advanced Materials, 2017, 29, 1701756.	21.0	584
3	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.	19.5	460
4	Nitrogen-rich hard carbon as a highly durable anode for high-power potassium-ion batteries. Energy Storage Materials, 2017, 8, 161-168.	18.0	408
5	Scalable and Sustainable Approach toward Highly Compressible, Anisotropic, Lamellar Carbon Sponge. CheM, 2018, 4, 544-554.	11.7	246
6	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.	13.7	234
7	Ether-compatible sulfurized polyacrylonitrile cathode with excellent performance enabled by fast kinetics via selenium doping. Nature Communications, 2019, 10, 1021.	12.8	211
8	Highly Conductive, Lightweight, Lowâ€Tortuosity Carbon Frameworks as Ultrathick 3D Current Collectors. Advanced Energy Materials, 2017, 7, 1700595.	19.5	210
9	Ultrafast Carbon-Carbon Single-Bond Rotational Isomerization in Room-Temperature Solution. Science, 2006, 313, 1951-1955.	12.6	194
10	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.	13.8	167
11	Integrated Intercalationâ€Based and Interfacial Sodium Storage in Grapheneâ€Wrapped Porous Li₄Ti₅O₁₂ Nanofibers Composite Aerogel. Advanced Energy Materials, 2016, 6, 1600322.	19.5	141
12	Fluorobenzene, A Lowâ€Density, Economical, and Bifunctional Hydrocarbon Cosolvent for Practical Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, .	14.9	121
13	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.	18.0	120
14	Palladium-Catalyzed Asymmetric Ring Expansion of Allenylcyclobutanols:Â An Asymmetric Wagnerâ^'Meerwein Shift. Journal of the American Chemical Society, 2006, 128, 6044-6045.	13.7	119
15	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.	13.7	104
16	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.	16.0	103
17	Rotational Cluster Anion Enabling Superionic Conductivity in Sodium-Rich Antiperovskite Na₃OBH₄. Journal of the American Chemical Society, 2019, 141, 5640-5644.	13.7	97
18	Se as eutectic accelerator in sulfurized polyacrylonitrile for high performance all-solid-state lithium-sulfur battery. Energy Storage Materials, 2019, 21, 287-296.	18.0	93

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19	Nitrofullerene, a C₆₀-based Bifunctional Additive with Smoothing and Protecting Effects for Stable Lithium Metal Anode. Nano Letters, 2019, 19, 8780-8786.	9.1	83
20	Stereoselective, Dual-Mode Ruthenium-Catalyzed Ring Expansion of Alkynylcyclopropanols. Journal of the American Chemical Society, 2008, 130, 17258-17259.	13.7	82
21	Enantioselective Palladium-Catalyzed Addition of 1,3-Dicarbonyl Compounds to an Allene Derivative. Chemistry - A European Journal, 2005, 11, 7075-7082.	3.3	80
22	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.	10.3	78
23	Au@CdS Coreâ€“Shell Nanoparticlesâ€Modified ZnO Nanowires Photoanode for Efficient Photoelectrochemical Water Splitting. Advanced Science, 2015, 2, 1500135.	11.2	77
24	Li4-Sb Sn1-S4 solid solutions for air-stable solid electrolytes. Journal of Energy Chemistry, 2020, 41, 171-176.	12.9	75
25	Selenium or Tellurium as Eutectic Accelerators for High-Performance Lithium/Sodiumâ€“Sulfur Batteries. Electrochemical Energy Reviews, 2020, 3, 613-642.	25.5	75
26	High Performance Room Temperature Sodiumâ€“Sulfur Battery by Eutectic Acceleration in Tellurium-Doped Sulfurized Polyacrylonitrile. ACS Applied Energy Materials, 2019, 2, 2956-2964.	5.1	73
27	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.	12.7	71
28	Free-Standing Mn₃O₄@CNF/S Paper Cathodes with High Sulfur Loading for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 13406-13412.	8.0	68
29	Diluted High Concentration Electrolyte with Dual Effects for Practical Lithium-Sulfur Batteries. Energy Storage Materials, 2021, 36, 333-340.	18.0	66
30	Reconfiguring Organosulfur Cathode by Over-Lithiation to Enable Ultrathick Lithium Metal Anode toward Practical Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 13784-13793.	14.6	62
31	Enhancing ionic conductivity of solid electrolyte by lithium substitution in halogenated Li-Argyrodite. Journal of Power Sources, 2020, 450, 227601.	7.8	58
32	Cobalt-embedded carbon nanofiber as electrocatalyst for polysulfide redox reaction in lithium sulfur batteries. Electrochimica Acta, 2019, 304, 11-19.	5.2	57
33	Design and synthesis of room temperature stable Li-argyrodite superionic conductors via cation doping. Journal of Materials Chemistry A, 2019, 7, 2717-2722.	10.3	54
34	Fullerenes for rechargeable battery applications: Recent developments and future perspectives. Journal of Energy Chemistry, 2021, 55, 70-79.	12.9	54
35	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.	5.6	53
36	Challenges and key parameters in exploring the cyclability limitation of practical lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 24215-24240.	10.3	53

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37	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.	16.0	52
38	Nanophase-Separated, Elastic Epoxy Composite Thin Film as an Electrolyte for Stable Lithium Metal Batteries. Nano Letters, 2021, 21, 3611-3618.	9.1	47
39	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.	8.0	44
40	Improvement of stability and solid-state battery performances of annealed 70Li2Sâ€“30P2S5 electrolytes by additives. Rare Metals, 2022, 41, 106-114.	7.1	38
41	Tuning Solid Interfaces via Varying Electrolyte Distributions Enables Highâ€Performance Solidâ€State Batteries. Energy and Environmental Materials, 2023, 6, .	12.8	36
42	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.	18.0	34
43	Facile synthesis of Li2S@C composites as cathode for Liâ€“S batteries. Journal of Energy Chemistry, 2019, 37, 111-116.	12.9	33
44	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.	7.8	33
45	Material and Interfacial Modification toward a Stable Room-Temperature Solid-State Naâ€“S Battery. ACS Applied Materials & Interfaces, 2020, 12, 20563-20569.	8.0	33
46	Nitrofullerene as an electrolyte-compatible additive for high-performance sodium metal batteries. Nano Energy, 2021, 89, 106396.	16.0	33
47	Enabling ultrafast lithium-ion conductivity of Li2ZrCl6 by indium doping. Chinese Chemical Letters, 2022, 33, 4635-4639.	9.0	33
48	Low Tortuosity and Reinforced Concrete Type Ultraâ€Thick Electrode for Practical Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	14.9	33
49	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.	10.3	28
50	Electrocatalytic activity of lithium polysulfides adsorbed into porous TiO2 coated MWCNTs hybrid structure for lithium-sulfur batteries. Scientific Reports, 2017, 7, 40679.	3.3	26
51	Group 14 element based sodium chalcogenide Na4Sn0.67Si0.33S4 as structure template for exploring sodium superionic conductors. Energy Storage Materials, 2019, 23, 508-513.	18.0	26
52	Ultrathin polymer electrolyte film prepared by in situ polymerization for lithium metal batteries. Materials Today Energy, 2021, 21, 100785.	4.7	25
53	Unraveling the Conversion Evolution on Solidâ€State Naâ€“SeS₂ Battery via In Situ TEM. Advanced Science, 2022, 9, e2200744.	11.2	25
54	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.	12.7	24

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55	Unraveling the crystallinity on battery performances of chlorine-rich argyrodite electrolytes. Journal of Power Sources, 2022, 520, 230890.	7.8	24
56	Chalcogenide-based inorganic sodium solid electrolytes. Journal of Materials Chemistry A, 2021, 9, 5134-5148.	10.3	23
57	Enhanced homogeneity of electrochemical reaction via low tortuosity enabling high-voltage nickel-rich layered oxide thick-electrode. Energy Storage Materials, 2022, 46, 443-451.	18.0	23
58	Fluorescence Emission and Absorption Spectra of Single Anabaena sp. Strain PCC7120 CellsÂ¶. Photochemistry and Photobiology, 2002, 76, 310.	2.5	22
59	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.	2.8	22
60	Hierarchical nitrogen-doped porous graphene/reduced fluorographene/sulfur hybrids for high-performance lithiumâ€“sulfur batteries. Physical Chemistry Chemical Physics, 2017, 19, 2567-2573.	2.8	22
61	Unveiling low-tortuous effect on electrochemical performance toward ultrathick LiFePO4 electrode with 100ÂmgÂcmâ¯2 area loading. Journal of Power Sources, 2021, 515, 230588.	7.8	22
62	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.	12.7	21
63	In situ prepared â€œpolymer-in-saltâ€•electrolytes enabling high-voltage lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 11732-11741.	10.3	21
64	Facile synthesis of mesoporous graphene platelets with in situ nitrogen and sulfur doping for lithiumâ€“sulfur batteries. RSC Advances, 2017, 7, 22567-22577.	3.6	20
65	Fluorobenzene-based diluted highly concentrated carbonate electrolyte for practical high-voltage lithium metal batteries. Journal of Power Sources, 2021, 506, 230086.	7.8	20
66	Dualâ€Functional Organotelluride Additive for Highly Efficient Sulfur Redox Kinetics and Lithium Regulation in Lithiumâ€“Sulfur Batteries. Energy and Environmental Materials, 2023, 6, .	12.8	20
67	Enhancing the Reversibility of Lithium Cobalt Oxide Phase Transition in Thick Electrode via Low Tortuosity Design. Nano Letters, 2022, 22, 2429-2436.	9.1	20
68	Scalable fabrication of solid-state batteries through high-energy electronic beam. Chemical Engineering Journal, 2022, 431, 134323.	12.7	19
69	Fluorobenzene diluted low-density electrolyte for high-energy density and high-performance lithium-sulfur batteries. Journal of Energy Chemistry, 2022, 68, 752-761.	12.9	19
70	Synthetic optimization and application of Li-argyrodite Li6PS5I in solid-state battery at different temperatures. Rare Metals, 2022, 41, 798-805.	7.1	18
71	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.	12.9	17
72	Facile preparation of a stable 3D host for lithium metal anodes. Chemical Communications, 2020, 56, 9898-9900.	4.1	17

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73	Low concentration electrolyte with non-solvating cosolvent enabling high-voltage lithium metal batteries. IScience, 2022, 25, 103490.	4.1	17
74	<scp>Anionâ€Regulated Weakly Solvating</scp> Electrolytes for <scp>Highâ€Voltage</scp> Lithium Metal Batteries. Energy and Environmental Materials, 2023, 6, .	12.8	17
75	Dual Play of Chitinâ€Derived Nâ€Doped Carbon Nanosheets Enabling Highâ€Performance Naâ€SeS₂ Half/Full Cells. Batteries and Supercaps, 2020, 3, 165-173.	4.7	16
76	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.	6.7	15
77	A model cathode for mechanistic study of organosulfide electrochemistry in Li-organosulfide batteries. Journal of Energy Chemistry, 2022, 66, 440-447.	12.9	15
78	Tuning ionic conductivity to enable all-climate solid-state Liâ€“S batteries with superior performances. Materials Advances, 2022, 3, 1047-1054.	5.4	15
79	Accidental vibrational degeneracy in vibrational excited states observed with ultrafast two-dimensional IR vibrational echo spectroscopy. Journal of Chemical Physics, 2005, 123, 164301.	3.0	13
80	Mechanism and kinetic studies on the synthesis of LiFePO4via solid-state reactions. CrystEngComm, 2013, 15, 10648.	2.6	13
81	Facile Generation of Polymerâ€“Alloy Hybrid Layers for Dendriteâ€Free Lithiumâ€Metal Anodes with Improved Moisture Stability. Angewandte Chemie, 2019, 131, 11496-11500.	2.0	13
82	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.	3.6	13
83	Electrospun Sulfurized Polyacrylonitrile Nanofibers for Long-Term Cycling Stability and High-Rate Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2022, 5, 5212-5218.	5.1	13
84	High-rate sodium metal batteries enabled by trifluormethylfullerene additive. Nano Research, 2022, 15, 7172-7179.	10.4	13
85	Synthesis and properties of optimized LiFePO4/C by a CVD-assisted two-step coating method. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	12
86	Insight into sulfur-rich selenium sulfide/pyrolyzed polyacrylonitrile cathodes for Liâ€“S batteries. Sustainable Energy and Fuels, 2020, 4, 3588-3596.	4.9	12
87	Diluted Highâ€Concentration Electrolyte Based on Phosphate for Highâ€Performance Lithiumâ€Metal Batteries. Batteries and Supercaps, 2022, 5, .	4.7	12
88	Achieving superior ionic conductivity of Li6PS5I via introducing LiCl. Solid State Ionics, 2022, 377, 115871.	2.7	12
89	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.	9.4	12
90	Granadilla-Inspired Structure Design for Conversion/Alloy-Reaction Electrode with Integrated Lithium Storage Behaviors. ACS Applied Materials & Interfaces, 2017, 9, 15470-15476.	8.0	11

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91	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.	5.5	11
92	Iodine-rich lithium argyrodite with enhanced ionic conductivity for solid-state batteries. Scripta Materialia, 2022, 210, 114475.	5.2	11
93	Lamellar mesoporous carbon derived from bagasse for the cathode materials of lithiumâ€“sulfur batteries. RSC Advances, 2017, 7, 13595-13603.	3.6	10
94	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.	8.0	10
95	In Situ Characterization of Over-Lithiation of Organosulfide-Based Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 41555-41562.	8.0	9
96	An organodiselenide containing electrolyte enables sulfurized polyacrylonitrile cathodes with fast redox kinetics in Liâ€“S batteries. Chemical Communications, 2021, 57, 9688-9691.	4.1	8
97	Revealing milling durations and sintering temperatures on conductivity and battery performances of Li2.25Zr0.75Fe0.25Cl6 electrolyte. Chinese Chemical Letters, 2023, 34, 107544.	9.0	6
98	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.	1.0	3
99	Facile synthesis and electrochemical properties of Na-rich anti-perovskite solid electrolytes. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228201-228201.	0.5	2
100	Constructing Highâ€Performance Quasiâ€Solidâ€State Sulfur Cathodes via the Cooperation of Solid Electrolyte Interface and Selenium Doping. ChemElectroChem, 2022, 9, .	3.4	1
101	High-performance prelithiated Si-S full cell enabled by trifluorobenzene modified diluted high-concentration electrolyte. Materials Today Energy, 2022, 28, 101069.	4.7	1
102	(Invited) Chemical Manipulation for High Performance Li-S Battery. ECS Meeting Abstracts, 2020, MA2020-01, 159-159.	0.0	0
103	Bifunctional Additive with Smoothing and Protecting Effects for Stable Lithium Metal Anode. ECS Meeting Abstracts, 2020, MA2020-02, 3532-3532.	0.0	0
104	Chemical Manipulation Towards High Performance Li-S Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 362-362.	0.0	0
105	Electrolyte Modification and Its Application for High Performance Li Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 723-723.	0.0	0