Xuefeng Wang

List of Publications by Year in descending order

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61 papers	7,307 citations	87723 38 h-index	133063 59 g-index
65 all docs	65 docs citations	65 times ranked	7249 citing authors

#	Article	IF	Citations
1	Localizedâ€domains staging structure and evolution in lithiated graphite. , 2023, 5, .		21
2	Effect of vacancy-tailored Mn3+ spinning on enhancing structural stability. Energy Storage Materials, 2022, 44, 231-238.	9.5	22
3	Deciphering the Role of Fluoroethylene Carbonate towards Highly Reversible Sodium Metal Anodes. Research, 2022, 2022, 9754612.	2.8	23
4	Topologically protected oxygen redox in a layered manganese oxide cathode for sustainable batteries. Nature Sustainability, 2022, 5, 214-224.	11.5	44
5	Configurationâ€dependent anionic redox in cathode materials. , 2022, 1, .		28
6	Anionâ€“Diluent Pairing for Stable High-Energy Li Metal Batteries. ACS Energy Letters, 2022, 7, 1338-1347.	8.8	108
7	8.5ÂÂµmâ€Thick Flexibleâ€Rigid Hybrid Solidâ€“Electrolyte/Lithium Integration for Airâ€Stable and Interfaceâ€Compatible Allâ€Solidâ€State Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	46
8	Feasibility to Improve the Stability of Lithium-Rich Layered Oxides by Surface Doping. ACS Applied Materials & Interfaces, 2022, 14, 18353-18359.	4.0	21
9	Comparative Study of Stability against Moisture for Solid Garnet Electrolytes with Different Dopants. Energies, 2022, 15, 3206.	1.6	8
10	A self-purifying electrolyte enables high energy Li ion batteries. Energy and Environmental Science, 2022, 15, 3331-3342.	15.6	40
11	Interfacial engineering to achieve an energy density of over 200â€‰Whâ€‰kgâ^'1 in sodium batteries. Nature Energy, 2022, 7, 511-519.	19.8	130
12	In Operando Visualization of Cation Disorder Unravels Voltage Decay in Niâ€Rich Cathodes. Small Methods, 2021, 5, e2000730.	4.6	18
13	Robust Surface Reconstruction Induced by Subsurface Ni/Li Antisites in Niâ€Rich Cathodes. Advanced Functional Materials, 2021, 31, 2010291.	7.8	36
14	Regulating Anion Redox and Cation Migration to Enhance the Structural Stability of Li-Rich Layered Oxides. ACS Applied Materials & Interfaces, 2021, 13, 12159-12168.	4.0	32
15	Near-room temperature ferromagnetic insulating state in highly distorted LaCoO2.5 with CoO5 square pyramids. Nature Communications, 2021, 12, 1853.	5.8	25
16	Iron carbide allured lithium metal storage in carbon nanotube cavities. Energy Storage Materials, 2021, 36, 459-465.	9.5	39
17	Competitive Solvation Enhanced Stability of Lithium Metal Anode in Dual-Salt Electrolyte. Nano Letters, 2021, 21, 3310-3317.	4.5	95
18	Revisiting the designing criteria of advanced solid electrolyte interphase on lithium metal anode under practical condition. Nano Energy, 2021, 83, 105847.	8.2	79

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19	Anionic Effect on Enhancing the Stability of a Solid Electrolyte Interphase Film for Lithium Deposition on Graphite. Nano Letters, 2021, 21, 5316-5323.	4.5	46
20	Chlorinated dual-protective layers as interfacial stabilizer for dendrite-free lithium metal anode. Energy Storage Materials, 2021, 41, 485-494.	9.5	66
21	Cationic disordering modulated electrochemical performances of layer-structured Li2MoO3. Materials Today Physics, 2021, 21, 100561.	2.9	4
22	Phase Diagram Determined Lithium Plating/Stripping Behaviors on Lithiophilic Substrates. ACS Energy Letters, 2021, 6, 4118-4126.	8.8	65
23	Cryo-EM for battery materials and interfaces: Workflow, achievements, and perspectives. IScience, 2021, 24, 103402.	1.9	16
24	Interplay between solid-electrolyte interphase and (in)active LixSi inÂsilicon anode. Cell Reports Physical Science, 2021, 2, 100668.	2.8	42
25	Dynamics of Anisotropic Oxygen-Ion Migration in Strained Cobaltites. Nano Letters, 2021, 21, 10507-10515.	4.5	9
26	Understanding the dropping of lithium plating potential in carbonate electrolyte. Nano Energy, 2020, 70, 104486.	8.2	42
27	Stack Pressure Considerations for Roomâ€Temperature Allâ€Solidâ€State Lithium Metal Batteries. Advanced Energy Materials, 2020, 10, 1903253.	10.2	327
28	Stacking Faults Hinder Lithium Insertion in Li₂RuO₃. Advanced Energy Materials, 2020, 10, 2002631.	10.2	22
29	Superiority of native vacancies in activating anionic redox in P2-type Na2/3[Mn7/9Mg1/9â–¡1/9]O2. Nano Energy, 2020, 78, 105172.	8.2	40
30	Glassy Li metal anode for high-performance rechargeable Li batteries. Nature Materials, 2020, 19, 1339-1345.	13.3	162
31	Unveiling the Stable Nature of the Solid Electrolyte Interphase between Lithium Metal and LiPON via Cryogenic Electron Microscopy. Joule, 2020, 4, 2484-2500.	11.7	136
32	Interfaces and Interphases in All-Solid-State Batteries with Inorganic Solid Electrolytes. Chemical Reviews, 2020, 120, 6878-6933.	23.0	676
33	Thin Solid Electrolyte Layers Enabled by Nanoscopic Polymer Binding. ACS Energy Letters, 2020, 5, 955-961.	8.8	36
34	Pressure effects on sulfide electrolytes for all solid-state batteries. Journal of Materials Chemistry A, 2020, 8, 5049-5055.	5.2	191
35	Insights into Lithium and Sodium Storage in Porous Carbon. Nano Letters, 2020, 20, 3836-3843.	4.5	86
36	Elucidating Reversible Electrochemical Redox of Li₆PS₅Cl Solid Electrolyte. ACS Energy Letters, 2019, 4, 2418-2427.	8.8	288

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37	High-Efficiency Lithium-Metal Anode Enabled by Liquefied Gas Electrolytes. Joule, 2019, 3, 1986-2000.	11.7	183
38	Revealing Nanoscale Solidâ€“Solid Interfacial Phenomena for Long-Life and High-Energy All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 43138-43145.	4.0	122
39	Quantifying inactive lithium in lithium metal batteries. Nature, 2019, 572, 511-515.	13.7	852
40	Atomic Scale Recognition of Structure in the Intercalation of Sodium by Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 2120-2121.	0.2	0
41	Cryogenic Focused Ion Beam Characterization of Lithium Metal Anodes. ACS Energy Letters, 2019, 4, 489-493.	8.8	106
42	Bisalt ether electrolytes: a pathway towards lithium metal batteries with Ni-rich cathodes. Energy and Environmental Science, 2019, 12, 780-794.	15.6	310
43	Cathode electrolyte interface enabling stable Liâ€“S batteries. Energy Storage Materials, 2019, 21, 474-480.	9.5	59
44	In situ formed polymer gel electrolytes for lithium batteries with inherent thermal shutdown safety features. Journal of Materials Chemistry A, 2019, 7, 16984-16991.	5.2	46
45	Key Issues Hindering a Practical Lithium-Metal Anode. Trends in Chemistry, 2019, 1, 152-158.	4.4	328
46	Role of Polyacrylic Acid (PAA) Binder on the Solid Electrolyte Interphase in Silicon Anodes. Chemistry of Materials, 2019, 31, 2535-2544.	3.2	119
47	Native Vacancy Enhanced Oxygen Redox Reversibility and Structural Robustness. Advanced Energy Materials, 2019, 9, 1803087.	10.2	70
48	Intercalation and Conversion Reactions of Nanosized Î²-MnO₂ Cathode in the Secondary Zn/MnO₂ Alkaline Battery. Journal of Physical Chemistry C, 2018, 122, 11177-11185.	1.5	56
49	Structure and Solution Dynamics of Lithium Methyl Carbonate as a Protective Layer For Lithium Metal. ACS Applied Energy Materials, 2018, 1, 1864-1869.	2.5	41
50	Mitigating oxygen release in anionic-redox-active cathode materials by cationic substitution through rational design. Journal of Materials Chemistry A, 2018, 6, 24651-24659.	5.2	18
51	Unveiling the Role of tBPâ€“LiTFSI Complexes in Perovskite Solar Cells. Journal of the American Chemical Society, 2018, 140, 16720-16730.	6.6	193
52	Cryogenic Electron Microscopy for Characterizing and Diagnosing Batteries. Joule, 2018, 2, 2225-2234.	11.7	118
53	Controlled deposition of Li metal. Nano Energy, 2017, 32, 241-246.	8.2	70
54	New Insights on the Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases via Cryogenic TEM. Nano Letters, 2017, 17, 7606-7612.	4.5	308

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55	Atomic-Scale Recognition of Surface Structure and Intercalation Mechanism of Ti₃C₂X. Journal of the American Chemical Society, 2015, 137, 2715-2721.	6.6	516
56	Anti-P2 structured Na0.5NbO2and its negative strain effect. Energy and Environmental Science, 2015, 8, 2753-2759.	15.6	14
57	Microâ€MoS₂ with Excellent Reversible Sodiumâ€Ion Storage. Chemistry - A European Journal, 2015, 21, 6465-6468.	1.7	55
58	Selecting Substituent Elements for Li-Rich Mn-Based Cathode Materials by Density Functional Theory (DFT) Calculations. Chemistry of Materials, 2015, 27, 3456-3461.	3.2	149
59	Guestâ€“host interactions and their impacts on structure and performance of nano-MoS₂. Nanoscale, 2015, 7, 637-641.	2.8	47
60	Atomic-Scale Clarification of Structural Transition of MoS₂ upon Sodium Intercalation. ACS Nano, 2014, 8, 11394-11400.	7.3	355
61	Improved electron/Li-ion transport and oxygen stability of Mo-doped Li2MnO3. Journal of Materials Chemistry A, 2014, 2, 4811.	5.2	101