Changhong Wang

List of Publications by Year
in descending order

99	8,442	34105	45317
papers	citations	52 h-index	90 g-index

99	99	99	6349
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Progress and perspectives on halide lithium conductors for all-solid-state lithium batteries. Energy and Environmental Science, 2020, 13, 1429-1461.	30.8	366
2	Air-stable Li₃InCl₆ electrolyte with high voltage compatibility for all-solid-state batteries. Energy and Environmental Science, 2019, 12, 2665-2671.	30.8	345
3	Monodispersed Sulfur Nanoparticles for Lithiumâ€“Sulfur Batteries with Theoretical Performance. Nano Letters, 2015, 15, 798-802.	9.1	273
4	NiFe Alloy Nanoparticles with hcp Crystal Structure Stimulate Superior Oxygen Evolution Reaction Electrocatalytic Activity. Angewandte Chemie - International Edition, 2019, 58, 6099-6103.	13.8	267
5	Site-Occupation-Tuned Superionic Li_xScCl_{3+x}Halide Solid Electrolytes for All-Solid-State Batteries. Journal of the American Chemical Society, 2020, 142, 7012-7022.	13.7	260
6	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 22470-22474.	13.8	257
7	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie - International Edition, 2019, 58, 16427-16432.	13.8	232
8	A Novel Organic â€œPolyureaâ€•Thin Film for Ultralongâ€Life Lithiumâ€Metal Anodes via Molecularâ€Layer Deposition. Advanced Materials, 2019, 31, e1806541.	21.0	204
9	Critical Review on Lowâ€Temperature Liâ€Ion/Metal Batteries. Advanced Materials, 2022, 34, e2107899.	21.0	204
10	All-solid-state lithium batteries enabled by sulfide electrolytes: from fundamental research to practical engineering design. Energy and Environmental Science, 2021, 14, 2577-2619.	30.8	201
11	Ultrafine Sulfur Nanoparticles in Conducting Polymer Shell as Cathode Materials for High Performance Lithium/Sulfur Batteries. Scientific Reports, 2013, 3, 1910.	3.3	193
12	A Versatile Snâ€Substituted Argyrodite Sulfide Electrolyte for Allâ€Solidâ€State Li Metal Batteries. Advanced Energy Materials, 2020, 10, 1903422.	19.5	183
13	Ultrastable Anode Interface Achieved by Fluorinating Electrolytes for All-Solid-State Li Metal Batteries. ACS Energy Letters, 2020, 5, 1035-1043.	17.4	176
14	A high-energy sulfur cathode in carbonate electrolyte by eliminating polysulfides via solid-phase lithium-sulfur transformation. Nature Communications, 2018, 9, 4509.	12.8	175
15	Promoting selective electroreduction of nitrates to ammonia over electron-deficient Co modulated by rectifying Schottky contacts. Science China Chemistry, 2020, 63, 1469-1476.	8.2	155
16	Unravelling the Chemistry and Microstructure Evolution of a Cathodic Interface in Sulfide-Based All-Solid-State Li-Ion Batteries. ACS Energy Letters, 2019, 4, 2480-2488.	17.4	154
17	Solidâ€State Plastic Crystal Electrolytes: Effective Protection Interlayers for Sulfideâ€Based Allâ€Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1900392.	14.9	154
18	Rational Design of Cathode Structure for High Rate Performance Lithiumâ€“Sulfur Batteries. Nano Letters, 2015, 15, 5443-5448.	9.1	147

#	Article	IF	Citations
19	Boosting the performance of lithium batteries with solid-liquid hybrid electrolytes: Interfacial properties and effects of liquid electrolytes. Nano Energy, 2018, 48, 35-43.	16.0	143
20	In Situ Li₃PS₄ Solidâ€State Electrolyte Protection Layers for Superior Longâ€Life and Highâ€Rate Lithiumâ€Metal Anodes. Advanced Materials, 2018, 30, e1804684.	21.0	140
21	Stabilizing interface between Li10SnP2S12 and Li metal by molecular layer deposition. Nano Energy, 2018, 53, 168-174.	16.0	132
22	Toward High Areal Energy and Power Density Electrode for Li-Ion Batteries via Optimized 3D Printing Approach. ACS Applied Materials & Interfaces, 2018, 10, 39794-39801.	8.0	126
23	Li₁₀Ge(P_{1â€“x}Sb_x)₂S₁₂ Lithium-Ion Conductors with Enhanced Atmospheric Stability. Chemistry of Materials, 2020, 32, 2664-2672.	6.7	125
24	Towards high performance Li metal batteries: Nanoscale surface modification of 3D metal hosts for pre-stored Li metal anodes. Nano Energy, 2018, 54, 375-382.	16.0	123
25	Highâ€Performance Liâ€“SeS_x Allâ€Solidâ€State Lithium Batteries. Advanced Materials, 2019, 31, e1808100.	21.0	121
26	Natural SEI-Inspired Dual-Protective Layers via Atomic/Molecular Layer Deposition for Long-Life Metallic Lithium Anode. Matter, 2019, 1, 1215-1231.	10.0	120
27	Carbon paper interlayers: A universal and effective approach for highly stable Li metal anodes. Nano Energy, 2018, 43, 368-375.	16.0	117
28	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 4474-4478.	13.8	116
29	Dual-functional interfaces for highly stable Ni-rich layered cathodes in sulfide all-solid-state batteries. Energy Storage Materials, 2020, 27, 117-123.	18.0	109
30	Single crystal cathodes enabling high-performance all-solid-state lithium-ion batteries. Energy Storage Materials, 2020, 30, 98-103.	18.0	109
31	Direct Electrosynthesis of Urea from Carbon Dioxide and Nitric Oxide. ACS Energy Letters, 2022, 7, 284-291.	17.4	105
32	Sulfurâ€“amine chemistry-based synthesis of multi-walled carbon nanotubeâ€“sulfur composites for high performance Liâ€“S batteries. Chemical Communications, 2014, 50, 1202-1204.	4.1	103
33	High-performance all-solid-state Liâ€“Se batteries induced by sulfide electrolytes. Energy and Environmental Science, 2018, 11, 2828-2832.	30.8	99
34	A universal wet-chemistry synthesis of solid-state halide electrolytes for all-solid-state lithium-metal batteries. Science Advances, 2021, 7, eabh1896.	10.3	93
35	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie, 2019, 131, 16579-16584.	2.0	92
36	Selective Transfer Semihydrogenation of Alkynes with H₂O (D₂O) as the H (D) Source over a Pdâ€P Cathode. Angewandte Chemie - International Edition, 2020, 59, 21170-21175.	13.8	91

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37	Cu clusters/TiO_{2â^'x} with abundant oxygen vacancies for enhanced electrocatalytic nitrate reduction to ammonia. Journal of Materials Chemistry A, 2022, 10, 6448-6453.	10.3	91
38	Solvent-Free Approach for Interweaving Freestanding and Ultrathin Inorganic Solid Electrolyte Membranes. ACS Energy Letters, 2022, 7, 410-416.	17.4	91
39	Manipulating Interfacial Nanostructure to Achieve Highâ€Performance Allâ€Solidâ€State Lithiumâ€Ion Batteries. Small Methods, 2019, 3, 1900261.	8.6	90
40	Oxide-Derived Coreâ€“Shell Cu@Zn Nanowires for Urea Electrosynthesis from Carbon Dioxide and Nitrate in Water. ACS Nano, 2022, 16, 9095-9104.	14.6	86
41	Interface-assisted in-situ growth of halide electrolytes eliminating interfacial challenges of all-inorganic solid-state batteries. Nano Energy, 2020, 76, 105015.	16.0	80
42	Stabilization of all-solid-state Liâ€“S batteries with a polymerâ€“ceramic sandwich electrolyte by atomic layer deposition. Journal of Materials Chemistry A, 2018, 6, 23712-23719.	10.3	77
43	Converting copper sulfide to copper with surface sulfur for electrocatalytic alkyne semi-hydrogenation with water. Nature Communications, 2021, 12, 3881.	12.8	77
44	Vulcanization accelerator enabled sulfurized carbon materials for high capacity and high stability of lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 1392-1395.	10.3	66
45	Investigation and Manipulation of Different Analog Behaviors of Memristor as Electronic Synapse for Neuromorphic Applications. Scientific Reports, 2016, 6, 22970.	3.3	66
46	Advanced Highâ€Voltage Allâ€Solidâ€State Liâ€Ion Batteries Enabled by a Dualâ€Halogen Solid Electrolyte. Advanced Energy Materials, 2021, 11, 2100836.	19.5	64
47	Deciphering Interfacial Chemical and Electrochemical Reactions of Sulfideâ€Based Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2021, 11, 2100210.	19.5	63
48	Thermally assisted photocatalytic conversion of CO₂â€“H₂O to C₂H₄over carbon doped In₂S₃nanosheets. Journal of Materials Chemistry A, 2020, 8, 10175-10179.	10.3	61
49	Unveiling the critical role of interfacial ionic conductivity in all-solid-state lithium batteries. Nano Energy, 2020, 72, 104686.	16.0	56
50	Sulfur Vacancy-Promoted Highly Selective Electrosynthesis of Functionalized Aminoarenes via Transfer Hydrogenation of Nitroarenes with H ₂ O over a Co ₃ S _{4â^'} _x Nanosheet Cathode. CCS Chemistry, 2021, 3, 507-515.	7.8	56
51	Ru-Doped Pd Nanoparticles for Nitrogen Electrooxidation to Nitrate. ACS Catalysis, 2021, 11, 14032-14037.	11.2	56
52	Tailoring bulk Li+ ion diffusion kinetics and surface lattice oxygen activity for high-performance lithium-rich manganese-based layered oxides. Energy Storage Materials, 2021, 37, 509-520.	18.0	55
53	Gradiently Sodiated Alucone as an Interfacial Stabilizing Strategy for Solidâ€State Na Metal Batteries. Advanced Functional Materials, 2020, 30, 2001118.	14.9	53
54	In situ formation of highly controllable and stable Na₃PS₄ as a protective layer for Na metal anode. Journal of Materials Chemistry A, 2019, 7, 4119-4125.	10.3	51

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55	Ultrahighâ€Capacity and Longâ€Life Lithiumâ€“Metal Batteries Enabled by Engineering Carbon Nanofiberâ€“Stabilized Graphene Aerogel Film Host. Small, 2018, 14, e1803310.	10.0	48
56	Regulated lithium plating and stripping by a nano-scale gradient inorganicâ€“organic coating for stable lithium metal anodes. Energy and Environmental Science, 2021, 14, 4085-4094.	30.8	48
57	Transition of the Reaction from Threeâ€Phase to Twoâ€Phase by Using a Hybrid Conductor for Highâ€Energyâ€Density Highâ€Rate Solidâ€State Liâ€O₂ Batteries. Angewandte Chemie - International Edition, 2021, 60, 5821-5826.	13.8	47
58	Enabling ultrafast ionic conductivity in Br-based lithium argyrodite electrolytes for solid-state batteries with different anodes. Energy Storage Materials, 2020, 30, 238-249.	18.0	46
59	Realizing Solidâ€Phase Reaction in Liâ€“S Batteries via Localized Highâ€Concentration Carbonate Electrolyte. Advanced Energy Materials, 2021, 11, 2101004.	19.5	46
60	Halide-based solid-state electrolyte as an interfacial modifier for high performance solid-state Liâ€“O2 batteries. Nano Energy, 2020, 75, 105036.	16.0	45
61	Memristive Devices with Highly Repeatable Analog States Boosted by Graphene Quantum Dots. Small, 2017, 13, 1603435.	10.0	44
62	Tuning bifunctional interface for advanced sulfide-based all-solid-state batteries. Energy Storage Materials, 2020, 33, 139-146.	18.0	44
63	Tuning ionic conductivity and electrode compatibility of Li3YBr6 for high-performance all solid-state Li batteries. Nano Energy, 2020, 77, 105097.	16.0	41
64	Dendrite-free and minimum volume change Li metal anode achieved by three-dimensional artificial interlayers. Energy Storage Materials, 2018, 15, 415-421.	18.0	40
65	Field-induced reagent concentration and sulfur adsorption enable efficient electrocatalytic semihydrogenation of alkynes. Science Advances, 2022, 8, eabm9477.	10.3	40
66	Atomic-scale Pt clusters decorated on porous Î±-Ni(OH)2 nanowires as highly efficient electrocatalyst for hydrogen evolution reaction. Science China Materials, 2017, 60, 1121-1128.	6.3	39
67	On the Cycling Performance of Naâ€O₂ Cells: Revealing the Impact of the Superoxide Crossover toward the Metallic Na Electrode. Advanced Functional Materials, 2018, 28, 1801904.	14.9	37
68	3D Printing of Free-Standing â€œO₂ Breathableâ€•Air Electrodes for High-Capacity and Long-Life Naâ€“O₂ Batteries. Chemistry of Materials, 2020, 32, 3018-3027.	6.7	37
69	Tailoring the Mechanical and Electrochemical Properties of an Artificial Interphase for Highâ€Performance Metallic Lithium Anode. Advanced Energy Materials, 2020, 10, 2001139.	19.5	36
70	Origin of high electrochemical stability of multi-metal chloride solid electrolytes for high energy all-solid-state lithium-ion batteries. Nano Energy, 2022, 92, 106674.	16.0	36
71	In-situ activated polycation as a multifunctional additive for Li-S batteries. Nano Energy, 2016, 26, 43-49.	16.0	34
72	Reversible Silicon Anodes with Long Cycles by Multifunctional Volumetric Buffer Layers. ACS Applied Materials & Interfaces, 2021, 13, 4093-4101.	8.0	34

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73	Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of Î±â€Nitrotoluenes to Eâ€Nitroethenes. Angewandte Chemie - International Edition, 2021, 60, 22010-22016.	13.8	34
74	Temperature-regulated reversible transformation of spinel-to-oxyhydroxide active species for electrocatalytic water oxidation. Journal of Materials Chemistry A, 2020, 8, 1631-1635.	10.3	33
75	Heterogeneous (de)chlorination-enabled control of reactivity in the liquid-phase synthesis of furanic biofuel from cellulosic feedstock. Green Chemistry, 2020, 22, 637-645.	9.0	32
76	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 22656-22660.	2.0	32
77	Multi-functional nanowall arrays with unrestricted Li⁺ transport channels and an integrated conductive network for high-areal-capacity Liâ€“S batteries. Journal of Materials Chemistry A, 2018, 6, 22958-22965.	10.3	31
78	Selenium Vacancy Promotes Transfer Semihydrogenation of Alkynes from Water Electrolysis. ACS Catalysis, 2021, 11, 9471-9478.	11.2	29
79	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie, 2021, 133, 4524-4528.	2.0	28
80	Reviewâ€"From Nano Size Effect to In Situ Wrapping: Rational Design of Cathode Structure for High Performance Lithiumâ^'Sulfur Batteries. Journal of the Electrochemical Society, 2018, 165, A6034-A6042.	2.9	25
81	O₂/O₂^{â€“} Crossover- and Dendrite-Free Hybrid Solid-State Naâ€“O₂ Batteries. Chemistry of Materials, 2019, 31, 9024-9031.	6.7	24
82	A nitrogen fixation strategy to synthesize NO via the thermally assisted photocatalytic conversion of air. Journal of Materials Chemistry A, 2020, 8, 19623-19630.	10.3	24
83	Hollow cobalt sulfide nanocapsules for electrocatalytic selective transfer hydrogenation of cinnamaldehyde with water. Cell Reports Physical Science, 2021, 2, 100337.	5.6	24
84	Reviving Anode Protection Layer in Naâ€O₂ Batteries: Failure Mechanism and Resolving Strategy. Advanced Energy Materials, 2021, 11, 2003789.	19.5	22
85	Membrane-free selective oxidation of thioethers with water over a nickel phosphide nanocube electrode. Cell Reports Physical Science, 2021, 2, 100462.	5.6	18
86	Totally compatible P4S10+n cathodes with self-generated Li+ pathways for sulfide-based all-solid-state batteries. Energy Storage Materials, 2020, 28, 325-333.	18.0	17
87	Atomically Dispersed Ru-Decorated TiO ₂ Nanosheets for Thermally Assisted Solar-Driven Nitrogen Oxidation into Nitric Oxide. CCS Chemistry, 2022, 4, 1208-1216.	7.8	17
88	Selective Transfer Semihydrogenation of Alkynes with H 2 O (D 2 O) as the H (D) Source over a Pdâ€P Cathode. Angewandte Chemie, 2020, 132, 21356-21361.	2.0	15
89	Unveiling micro internal short circuit mechanism in a 60ÂAh high-energy-density Li-ion pouch cell. Nano Energy, 2021, 84, 105908.	16.0	15
90	Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of Î±â€Nitrotoluenes to Eâ€Nitroethenes. Angewandte Chemie, 2021, 133, 22181-22187.	2.0	13

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91	Spatial random fields-based Bayesian method for calibrating geotechnical parameters with ground surface settlements induced by shield tunneling. Acta Geotechnica, 2022, 17, 1503-1519.	5.7	8
92	Probing heat generation and release in a 57.5 A h high-energy-density Li-ion pouch cell with a nickel-rich cathode and SiO_x/graphite anode. Journal of Materials Chemistry A, 2022, 10, 1227-1235.	10.3	6
93	Stochastic mechanics-based Bayesian method calibrating the constitutive parameters of the unified model for clay and sand with CPTU data. Acta Geotechnica, 2022, 17, 4577-4598.	5.7	4
94	Computing: Memristive Devices with Highly Repeatable Analog States Boosted by Graphene Quantum Dots (Small 20/2017). Small, 2017, 13, .	10.0	0
95	RÃ¼cktitelbild: Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Over	2.0	0
96	Size Effect of Sulfur Nanoparticles in Lithium Sulfur Batteries. ECS Meeting Abstracts, 2014, , .	0.0	0
97	Interface Engineering of Sulfide-Based All-Solid-State Lithium Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 308-308.	0.0	0
98	Stabilizing the Li Metal Interface: Molecular Layer Deposition for Advanced Next-Generation Energy Storage Systems. ECS Meeting Abstracts, 2020, MA2020-01, 281-281.	0.0	0
99	Design, Analysis and Application of a Mandrel-Beam-Frictional Sliding Damper. KSCE Journal of Civil Engineering, 0, , 1.	1.9	0