Changhong Wang

List of Publications by Year
in descending order

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99 papers	8,442 citations	41627 51 h-index	53065 89 g-index
99 all docs	99 docs citations	99 times ranked	7364 citing authors

#	Article	IF	Citations
1	Atomically Dispersed Ru-Decorated TiO ₂ Nanosheets for Thermally Assisted Solar-Driven Nitrogen Oxidation into Nitric Oxide. CCS Chemistry, 2022, 4, 1208-1216.	4.6	17
2	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.	8.2	36
3	Critical Review on Lowâ€Temperature Liâ€Ion/Metal Batteries. Advanced Materials, 2022, 34, e2107899.	11.1	204
4	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_{<i>x</i>}/graphite anode. Journal of Materials Chemistry A, 2022, 10, 1227-1235.	5.2	6
5	Spatial random fields-based Bayesian method for calibrating geotechnical parameters with ground surface settlements induced by shield tunneling. Acta Geotechnica, 2022, 17, 1503-1519.	2.9	8
6	Cu clusters/TiO_{2âˆ’<i>x</i>} with abundant oxygen vacancies for enhanced electrocatalytic nitrate reduction to ammonia. Journal of Materials Chemistry A, 2022, 10, 6448-6453.	5.2	91
7	Field-induced reagent concentration and sulfur adsorption enable efficient electrocatalytic semihydrogenation of alkynes. Science Advances, 2022, 8, eabm9477.	4.7	40
8	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.	2.9	4
9	Direct Electrosynthesis of Urea from Carbon Dioxide and Nitric Oxide. ACS Energy Letters, 2022, 7, 284-291.	8.8	105
10	Solvent-Free Approach for Interweaving Freestanding and Ultrathin Inorganic Solid Electrolyte Membranes. ACS Energy Letters, 2022, 7, 410-416.	8.8	91
11	Oxide-Derived Coreâ€"Shell Cu@Zn Nanowires for Urea Electrosynthesis from Carbon Dioxide and Nitrate in Water. ACS Nano, 2022, 16, 9095-9104.	7.3	86
12	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.	7.2	47
13	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 4474-4478.	7.2	116
14	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie, 2021, 133, 4524-4528.	1.6	28
15	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.	15.6	48
16	Reversible Silicon Anodes with Long Cycles by Multifunctional Volumetric Buffer Layers. ACS Applied Materials & Interfaces, 2021, 13, 4093-4101.	4.0	34
17	All-solid-state lithium batteries enabled by sulfide electrolytes: from fundamental research to practical engineering design. Energy and Environmental Science, 2021, 14, 2577-2619.	15.6	201
18	Reviving Anode Protection Layer in Naâ€O₂ Batteries: Failure Mechanism and Resolving Strategy. Advanced Energy Materials, 2021, 11, 2003789.	10.2	22

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19	Hollow cobalt sulfide nanocapsules for electrocatalytic selective transfer hydrogenation of cinnamaldehyde with water. Cell Reports Physical Science, 2021, 2, 100337.	2.8	24
20	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.	9.5	55
21	Deciphering Interfacial Chemical and Electrochemical Reactions of Sulfideâ€Based Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2021, 11, 2100210.	10.2	63
22	Realizing Solidâ€Phase Reaction in Liâ€“S Batteries via Localized Highâ€Concentration Carbonate Electrolyte. Advanced Energy Materials, 2021, 11, 2101004.	10.2	46
23	Converting copper sulfide to copper with surface sulfur for electrocatalytic alkyne semi-hydrogenation with water. Nature Communications, 2021, 12, 3881.	5.8	77
24	Membrane-free selective oxidation of thioethers with water over a nickel phosphide nanocube electrode. Cell Reports Physical Science, 2021, 2, 100462.	2.8	18
25	Unveiling micro internal short circuit mechanism in a 60Â Ah high-energy-density Li-ion pouch cell. Nano Energy, 2021, 84, 105908.	8.2	15
26	Selenium Vacancy Promotes Transfer Semihydrogenation of Alkynes from Water Electrolysis. ACS Catalysis, 2021, 11, 9471-9478.	5.5	29
27	Advanced Highâ€Voltage Allâ€Solidâ€State Liâ€Ion Batteries Enabled by a Dualâ€Halogen Solid Electrolyte. Advanced Energy Materials, 2021, 11, 2100836.	10.2	64
28	Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of Î±â€Nitrotoluenes to <i>E</i>â€Nitroethenes. Angewandte Chemie, 2021, 133, 22181-22187.	1.6	13
29	Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of Î±â€Nitrotoluenes to <i>E</i>â€Nitroethenes. Angewandte Chemie - International Edition, 2021, 60, 22010-22016.	7.2	34
30	A universal wet-chemistry synthesis of solid-state halide electrolytes for all-solid-state lithium-metal batteries. Science Advances, 2021, 7, eabh1896.	4.7	93
31	Sulfur Vacancy-Promoted Highly Selective Electrosynthesis of Functionalized Aminoarenes via Transfer Hydrogenation of Nitroarenes with H ₂ O over a Co ₃ S _{4âˆ’} <i> _x </i> Nanosheet Cathode. CCS Chemistry, 2021, 3, 507-515.	4.6	56
32	Ru-Doped Pd Nanoparticles for Nitrogen Electrooxidation to Nitrate. ACS Catalysis, 2021, 11, 14032-14037.	5.5	56
33	Dual-functional interfaces for highly stable Ni-rich layered cathodes in sulfide all-solid-state batteries. Energy Storage Materials, 2020, 27, 117-123.	9.5	109
34	Heterogeneous (de)chlorination-enabled control of reactivity in the liquid-phase synthesis of furanic biofuel from cellulosic feedstock. Green Chemistry, 2020, 22, 637-645.	4.6	32
35	Temperature-regulated reversible transformation of spinel-to-oxyhydroxide active species for electrocatalytic water oxidation. Journal of Materials Chemistry A, 2020, 8, 1631-1635.	5.2	33
36	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 22656-22660.	1.6	32

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37	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.	7.2	91
38	Tuning ionic conductivity and electrode compatibility of Li3YBr6 for high-performance all solid-state Li batteries. Nano Energy, 2020, 77, 105097.	8.2	41
39	Tuning bifunctional interface for advanced sulfide-based all-solid-state batteries. Energy Storage Materials, 2020, 33, 139-146.	9.5	44
40	A nitrogen fixation strategy to synthesize NO <i>via</i> the thermally assisted photocatalytic conversion of air. Journal of Materials Chemistry A, 2020, 8, 19623-19630.	5.2	24
41	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.	1.6	15
42	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 22470-22474.	7.2	257
43	Promoting selective electroreduction of nitrates to ammonia over electron-deficient Co modulated by rectifying Schottky contacts. Science China Chemistry, 2020, 63, 1469-1476.	4.2	155
44	Thermally assisted photocatalytic conversion of CO₂â€“H₂O to C₂H₄over carbon doped In₂S₃nanosheets. Journal of Materials Chemistry A, 2020, 8, 10175-10179.	5.2	61
45	Enabling ultrafast ionic conductivity in Br-based lithium argyrodite electrolytes for solid-state batteries with different anodes. Energy Storage Materials, 2020, 30, 238-249.	9.5	46
46	Single crystal cathodes enabling high-performance all-solid-state lithium-ion batteries. Energy Storage Materials, 2020, 30, 98-103.	9.5	109
47	Interface-assisted in-situ growth of halide electrolytes eliminating interfacial challenges of all-inorganic solid-state batteries. Nano Energy, 2020, 76, 105015.	8.2	80
48	Halide-based solid-state electrolyte as an interfacial modifier for high performance solid-state Liâ€“O2 batteries. Nano Energy, 2020, 75, 105036.	8.2	45
49	Tailoring the Mechanical and Electrochemical Properties of an Artificial Interphase for Highâ€Performance Metallic Lithium Anode. Advanced Energy Materials, 2020, 10, 2001139.	10.2	36
50	Totally compatible P4S10+n cathodes with self-generated Li+ pathways for sulfide-based all-solid-state batteries. Energy Storage Materials, 2020, 28, 325-333.	9.5	17
51	Unveiling the critical role of interfacial ionic conductivity in all-solid-state lithium batteries. Nano Energy, 2020, 72, 104686.	8.2	56
52	Site-Occupation-Tuned Superionic Li_{<i>x</i>}ScCl_{3+<i>x</i>}Halide Solid Electrolytes for All-Solid-State Batteries. Journal of the American Chemical Society, 2020, 142, 7012-7022.	6.6	260
53	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.	3.2	37
54	Ultrastable Anode Interface Achieved by Fluorinating Electrolytes for All-Solid-State Li Metal Batteries. ACS Energy Letters, 2020, 5, 1035-1043.	8.8	176

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55	A Versatile Snâ€Substituted Argyrodite Sulfide Electrolyte for Allâ€Solidâ€State Li Metal Batteries. Advanced Energy Materials, 2020, 10, 1903422.	10.2	183
56	Li₁₀Ge(P_{1â€“<i>x</i>}Sb<i>_x</i>)₂S₁₂ Lithium-Ion Conductors with Enhanced Atmospheric Stability. Chemistry of Materials, 2020, 32, 2664-2672.	3.2	125
57	Gradiently Sodiated Alucone as an Interfacial Stabilizing Strategy for Solidâ€State Na Metal Batteries. Advanced Functional Materials, 2020, 30, 2001118.	7.8	53
58	Progress and perspectives on halide lithium conductors for all-solid-state lithium batteries. Energy and Environmental Science, 2020, 13, 1429-1461.	15.6	366
59	Interface Engineering of Sulfide-Based All-Solid-State Lithium Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 308-308.	0.0	0
60	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
61	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie, 2019, 131, 16579-16584.	1.6	92
62	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie - International Edition, 2019, 58, 16427-16432.	7.2	232
63	RÃ¼cktitelbild: Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overlo	1.6	0
64	O₂/O₂^{â€“} Crossover- and Dendrite-Free Hybrid Solid-State Naâ€“O₂ Batteries. Chemistry of Materials, 2019, 31, 9024-9031.	3.2	24
65	Air-stable Li₃InCl₆ electrolyte with high voltage compatibility for all-solid-state batteries. Energy and Environmental Science, 2019, 12, 2665-2671.	15.6	345
66	Natural SEI-Inspired Dual-Protective Layers via Atomic/Molecular Layer Deposition for Long-Life Metallic Lithium Anode. Matter, 2019, 1, 1215-1231.	5.0	120
67	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.	8.8	154
68	<i>In situ</i> formation of highly controllable and stable Na₃PS₄ as a protective layer for Na metal anode. Journal of Materials Chemistry A, 2019, 7, 4119-4125.	5.2	51
69	Solidâ€State Plastic Crystal Electrolytes: Effective Protection Interlayers for Sulfideâ€Based Allâ€Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1900392.	7.8	154
70	Manipulating Interfacial Nanostructure to Achieve Highâ€Performance Allâ€Solidâ€State Lithiumâ€Ion Batteries. Small Methods, 2019, 3, 1900261.	4.6	90
71	NiFe Alloy Nanoparticles with hcp Crystal Structure Stimulate Superior Oxygen Evolution Reaction Electrocatalytic Activity. Angewandte Chemie - International Edition, 2019, 58, 6099-6103.	7.2	267
72	Highâ€Performance Liâ€“SeS<i>_x</i> Allâ€Solidâ€State Lithium Batteries. Advanced Materials, 2019, 31, e1808100.	11.1	121

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73	A Novel Organic â€œPolyureaâ€•Thin Film for Ultralongâ€Life Lithiumâ€Metal Anodes via Molecularâ€Layer Deposition. Advanced Materials, 2019, 31, e1806541.	11.1	204
74	Boosting the performance of lithium batteries with solid-liquid hybrid electrolytes: Interfacial properties and effects of liquid electrolytes. Nano Energy, 2018, 48, 35-43.	8.2	143
75	Reviewâ€”From Nano Size Effect to In Situ Wrapping: Rational Design of Cathode Structure for High Performance Lithiumâˆ’Sulfur Batteries. Journal of the Electrochemical Society, 2018, 165, A6034-A6042.	1.3	25
76	Carbon paper interlayers: A universal and effective approach for highly stable Li metal anodes. Nano Energy, 2018, 43, 368-375.	8.2	117
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.	5.2	31
78	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.	5.2	77
79	In Situ Li₃PS₄ Solidâ€State Electrolyte Protection Layers for Superior Longâ€Life and Highâ€Rate Lithiumâ€Metal Anodes. Advanced Materials, 2018, 30, e1804684.	11.1	140
80	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.	8.2	123
81	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.	4.0	126
82	A high-energy sulfur cathode in carbonate electrolyte by eliminating polysulfides via solid-phase lithium-sulfur transformation. Nature Communications, 2018, 9, 4509.	5.8	175
83	Ultrahighâ€Capacity and Longâ€Life Lithiumâ€“Metal Batteries Enabled by Engineering Carbon Nanofiberâ€“Stabilized Graphene Aerogel Film Host. Small, 2018, 14, e1803310.	5.2	48
84	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.	7.8	37
85	High-performance all-solid-state Liâ€“Se batteries induced by sulfide electrolytes. Energy and Environmental Science, 2018, 11, 2828-2832.	15.6	99
86	Dendrite-free and minimum volume change Li metal anode achieved by three-dimensional artificial interlayers. Energy Storage Materials, 2018, 15, 415-421.	9.5	40
87	Stabilizing interface between Li10SnP2S12 and Li metal by molecular layer deposition. Nano Energy, 2018, 53, 168-174.	8.2	132
88	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.	3.5	39
89	Computing: Memristive Devices with Highly Repeatable Analog States Boosted by Graphene Quantum Dots (Small 20/2017). Small, 2017, 13, .	5.2	0
90	Memristive Devices with Highly Repeatable Analog States Boosted by Graphene Quantum Dots. Small, 2017, 13, 1603435.	5.2	44

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91	Investigation and Manipulation of Different Analog Behaviors of Memristor as Electronic Synapse for Neuromorphic Applications. Scientific Reports, 2016, 6, 22970.	1.6	66
92	In-situ activated polycation as a multifunctional additive for Li-S batteries. Nano Energy, 2016, 26, 43-49.	8.2	34
93	Monodispersed Sulfur Nanoparticles for Lithiumâ€“Sulfur Batteries with Theoretical Performance. Nano Letters, 2015, 15, 798-802.	4.5	273
94	Rational Design of Cathode Structure for High Rate Performance Lithiumâ€“Sulfur Batteries. Nano Letters, 2015, 15, 5443-5448.	4.5	147
95	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.	5.2	66
96	Sulfurâ€“amine chemistry-based synthesis of multi-walled carbon nanotubeâ€“sulfur composites for high performance Liâ€“S batteries. Chemical Communications, 2014, 50, 1202-1204.	2.2	103
97	Size Effect of Sulfur Nanoparticles in Lithium Sulfur Batteries. ECS Meeting Abstracts, 2014, , .	0.0	0
98	Ultrafine Sulfur Nanoparticles in Conducting Polymer Shell as Cathode Materials for High Performance Lithium/Sulfur Batteries. Scientific Reports, 2013, 3, 1910.	1.6	193
99	Design, Analysis and Application of a Mandrel-Beam-Frictional Sliding Damper. KSCE Journal of Civil Engineering, 0, , 1.	0.9	0