Zhongwei Chen

List of Publications by Year in Descending Order

453 papers	35,087 citations	97 h-index	171 g-index
488 ext. papers	42,973 ext. citations	14.3 avg, IF	8 L-index

#	Paper	IF	Citations
453	Evidence of Morphological Change in Sulfur Cathodes upon Irradiation by Synchrotron X-rays. *ACS Energy Letters*, **2022**, 7, 577-582	20.1	1
452	A MOF-Derivative Decorated Hierarchical Porous Host Enabling Ultrahigh Rates and Superior Long-Term Cycling of Dendrite-Free Zn Metal Anodes.. *Advanced Materials*, **2022**, e2110047	24	19
451	Design of Quasi-MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for High-Performance Lithium–Sulfur Batteries (Adv. Mater. 2/2022). *Advanced Materials*, **2022**, 34, 2270015	24	
450	Coordinatively Deficient Single-atom Fe-N-C Electrocatalyst with Optimized Electronic Structure for High-performance Lithium-sulfur Batteries. *Energy Storage Materials*, **2022**, 46, 269-277	19.4	10
449	Porous organic polymers for Li-chemistry-based batteries: functionalities and characterization studies.. *Chemical Society Reviews*, **2022**,	58.5	8
448	Linker-Compensated Metal-Organic Framework with Electron Delocalized Metal Sites for Bifunctional Oxygen Electrocatalysis.. *Journal of the American Chemical Society*, **2022**,	16.4	10
447	Emerging Trends in Sustainable CO Management Materials.. *Advanced Materials*, **2022**, e2201547	24	4
446	Bioinspired Tough Solid-State Electrolyte for Flexible Ultralong-Life Zinc-Air Battery.. *Advanced Materials*, **2022**, e2110585	24	7
445	A MOF-Derivative Decorated Hierarchical Porous Host Enabling Ultrahigh Rates and Superior Long-Term Cycling of Dendrite-Free Zn Metal Anodes (Adv. Mater. 14/2022). *Advanced Materials*, **2022**, 34, 2270109	24	
444	Conductive Oxide Support Design and Synergistic Engineering of Bimetallic High-performance Electrocatalyst for Oxygen Reduction Reaction. *Chemical Engineering Journal*, **2022**, 136266	14.7	1
443	Engineering checkerboard-like heterostructured sulfur electrocatalyst towards high-performance lithium sulfur batteries. *Chemical Engineering Journal*, **2022**, 440, 135990	14.7	1
442	Engineering Electrochemical Surface for Efficient Carbon Dioxide Upgrade. *Advanced Energy Materials*, **2022**, 12, 2103289	21.8	3
441	Materials Engineering toward Durable Electrocatalysts for Proton Exchange Membrane Fuel Cells. *Advanced Energy Materials*, **2022**, 12, 2102665	21.8	4
440	Ionic interaction-mediated interlayer repulsion force promotes steadily shuttling of Zn2+ ions within VOPO4. *Nano Energy*, **2022**, 98, 107268	17.1	1
439	Nano-crumples induced Sn-Bi bimetallic interface pattern with moderate electron bank for highly efficient CO electroreduction.. *Nature Communications*, **2022**, 13, 2486	17.4	6
438	Integrating Nanoreactor with ONbC Heterointerface Design and Defects Engineering Toward High-Efficiency and Longevous Sodium Ion Battery (Adv. Energy Mater. 18/2022). *Advanced Energy Materials*, **2022**, 12, 2270071	21.8	
437	Three-Dimensionally Ordered Mesoporous Co3O4 Decorated with Mg as Bifunctional Oxygen Electrocatalysts for High-Performance Zinc-Air Batteries. *Nano Energy*, **2022**, 107425	17.1	4

436	Ordered macroporous design of sacrificial Co/VN nano-heterojunction as bifunctional oxygen electrocatalyst for rechargeable zinc-air batteries. *Chemical Engineering Journal*, **2021**, 433, 133509	14.7	1
435	Synergistic Binary Fe-Co Nanocluster Supported on Defective Tungsten Oxide as Efficient Oxygen Reduction Electrocatalyst in Zinc-Air Battery. *Advanced Science*, **2021**, 9, e2104237	13.6	6
434	Design of Quasi-MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for High-Performance Lithium-Sulfur Batteries. *Advanced Materials*, **2021**, e2105541	24	18
433	Hierarchically Porous TiC MXene with Tunable Active Edges and Unsaturated Coordination Bonds for Superior Lithium-Sulfur Batteries. *ACS Nano*, **2021**,	16.7	10
432	Solid Oxide Electrolysis of H2O and CO2 to Produce Hydrogen and Low-Carbon Fuels. *Electrochemical Energy Reviews*, **2021**, 4, 508-517	29.3	8
431	Modulating Metal□Organic Frameworks as Advanced Oxygen Electrocatalysts. *Advanced Energy Materials*, **2021**, 11, 2003291	21.8	34
430	A Gas-Phase Migration Strategy to Synthesize Atomically Dispersed Mn-N-C Catalysts for Zn-Air Batteries.. *Small Methods*, **2021**, 5, e2100024	12.8	12
429	"Two Ships in a Bottle" Design for Zn-Ag-O Catalyst Enabling Selective and Long-Lasting CO Electroreduction. *Journal of the American Chemical Society*, **2021**, 143, 6855-6864	16.4	36
428	Magnetic-Field-Stimulated Efficient Photocatalytic N2 Fixation over Defective BaTiO3 Perovskites. *Angewandte Chemie*, **2021**, 133, 12017-12025	3.6	5
427	R□ktitelbild: Magnetic-Field-Stimulated Efficient Photocatalytic N2 Fixation over Defective BaTiO3 Perovskites (Angew. Chem. 21/2021). *Angewandte Chemie*, **2021**, 133, 12252-12252	3.6	
426	Magnetic-Field-Stimulated Efficient Photocatalytic N Fixation over Defective BaTiO Perovskites. *Angewandte Chemie - International Edition*, **2021**, 60, 11910-11918	16.4	33
425	Sauna□Activation toward Intrinsic Lattice Deficiency in Carbon Nanotube Microspheres for High-Energy and Long-Lasting Lithium□Sulfur Batteries. *Advanced Energy Materials*, **2021**, 11, 2100497	21.8	16
424	Elucidating and tackling capacity fading of zinc-iodine redox flow batteries. *Chemical Engineering Journal*, **2021**, 412, 128499	14.7	5
423	Establishing the Preferential Adsorption of Anion-Dominated Solvation Structures in the Electrolytes for High-Energy-Density Lithium Metal Batteries. *Advanced Functional Materials*, **2021**, 31, 2011109	15.6	16
422	Defect Engineering for Expediting Li□S Chemistry: Strategies, Mechanisms, and Perspectives. *Advanced Energy Materials*, **2021**, 11, 2100332	21.8	52
421	Evolution of atomic-scale dispersion of FeNx in hierarchically porous 3D air electrode to boost the interfacial electrocatalysis of oxygen reduction in PEMFC. *Nano Energy*, **2021**, 83, 105734	17.1	19
420	Mesocrystallizing Nanograins for Enhanced Li+ Storage. *Advanced Energy Materials*, **2021**, 11, 2100503	21.8	3
419	Aligned sulfur-deficient ZnS1□ nanotube arrays as efficient catalyzer for high-performance lithium/sulfur batteries. *Nano Energy*, **2021**, 84, 105891	17.1	31

418	Li–S Batteries: Saunal Activation toward Intrinsic Lattice Deficiency in Carbon Nanotube Microspheres for High-Energy and Long-Lasting Lithium–Sulfur Batteries (Adv. Energy Mater. 26/2021). *Advanced Energy Materials*, **2021**, 11, 2170099	21.8	1
417	Electrolyte Design for Lithium Metal Anode-Based Batteries Toward Extreme Temperature Application. *Advanced Science*, **2021**, 8, e2101051	13.6	22
416	Self-Assembled Facilitated Transport Membranes with Tunable Carrier Distribution for Ethylene/Ethane Separation. *Advanced Functional Materials*, **2021**, 31, 2104349	15.6	2
415	Recent Progress on Flexible Zn-Air Batteries. *Energy Storage Materials*, **2021**, 35, 538-549	19.4	43
414	Unsaturated coordination polymer frameworks as multifunctional sulfur reservoir for fast and durable lithium-sulfur batteries. *Nano Energy*, **2021**, 79, 105393	17.1	22
413	Self-Templated Hierarchically Porous Carbon Nanorods Embedded with Atomic Fe-N4 Active Sites as Efficient Oxygen Reduction Electrocatalysts in Zn-Air Batteries. *Advanced Functional Materials*, **2021**, 31, 2008085	15.6	47
412	Regulated coordination environment of Ni single atom catalyst toward high-efficiency oxygen electrocatalysis for rechargeable Zinc-air batteries. *Energy Storage Materials*, **2021**, 35, 723-730	19.4	24
411	Microporous framework membranes for precise molecule/ion separations. *Chemical Society Reviews*, **2021**, 50, 986-1029	58.5	58
410	Deciphering interpenetrated interface of transition metal oxides/phosphates from atomic level for reliable Li/S electrocatalytic behavior. *Nano Energy*, **2021**, 81, 105602	17.1	23
409	Analogous Mixed Matrix Membranes with Self-Assembled Interface Pathways. *Angewandte Chemie - International Edition*, **2021**, 60, 5864-5870	16.4	10
408	Highly Stable Low-Cost Electrochemical Gas Sensor with an Alcohol-Tolerant N,S-Codoped Non-Precious Metal Catalyst Air Cathode. *ACS Sensors*, **2021**, 6, 752-763	9.2	1
407	Dissolving Vanadium into Titanium Nitride Lattice Framework for Rational Polysulfide Regulation in Li–S Batteries. *Advanced Energy Materials*, **2021**, 11, 2003020	21.8	22
406	Morphology-controlled synthesis of metal-organic frameworks derived lattice plane-altered iron oxide for efficient trifunctional electrocatalysts. *Nano Energy*, **2021**, 82, 105699	17.1	13
405	Analogous Mixed Matrix Membranes with Self-Assembled Interface Pathways. *Angewandte Chemie*, **2021**, 133, 5928-5934	3.6	1
404	Parasitic electrodeposition in Zn-MnO2 batteries and its suppression for prolonged cyclability. *Energy Storage Materials*, **2021**, 36, 478-484	19.4	14
403	Cationic–anionic redox couple gradient to immunize against irreversible processes of Li-rich layered oxides. *Journal of Materials Chemistry A*, **2021**, 9, 2325-2333	13	5
402	Rational design of interlayer binding towards highly reversible anion intercalation cathode for dual ion batteries. *Nano Energy*, **2021**, 81, 105643	17.1	3
401	A Novel Design of High-Temperature Polymer Electrolyte Membrane Acetone Fuel Cell Sensor. *Sensors and Actuators B: Chemical*, **2021**, 329, 129006	8.5	2

400	High-performance anion exchange membrane alkaline seawater electrolysis. *Journal of Materials Chemistry A*, **2021**, 9, 9586-9592	13	13
399	Localized Polysulfide Injector for the Activation of Bulk Lithium Sulfide. *Journal of the American Chemical Society*, **2021**, 143, 2185-2189	16.4	14
398	Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a High-Efficiency Lithium Polysulfide Conversion Process. *Angewandte Chemie*, **2021**, 133, 2401-2408	3.6	7
397	Constructing multifunctional solid electrolyte interface via in-situ polymerization for dendrite-free and low N/P ratio lithium metal batteries. *Nature Communications*, **2021**, 12, 186	17.4	61
396	Hierarchical Micro-Nanoclusters of Bimetallic Layered Hydroxide Polyhedrons as Advanced Sulfur Reservoir for High-Performance Lithium-Sulfur Batteries. *Advanced Science*, **2021**, 8, 2003400	13.6	19
395	Innentitelbild: Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a High-Efficiency Lithium Polysulfide Conversion Process (Angew. Chem. 5/2021). *Angewandte Chemie*, **2021**, 133, 2198-2198	3.6	
394	Reinforced polysulfide barrier by g-C3N4/CNT composite towards superior lithium-sulfur batteries. *Journal of Energy Chemistry*, **2021**, 53, 234-240	12	30
393	3d-Orbital Occupancy Regulated Ir-Co Atomic Pair Toward Superior Bifunctional Oxygen Electrocatalysis. *ACS Catalysis*, **2021**, 11, 8837-8846	13.1	26
392	Design Zwitterionic Amorphous Conjugated Micro-/Mesoporous Polymer Assembled Nanotentacle as Highly Efficient Sulfur Electrocatalyst for Lithium-Sulfur Batteries. *Advanced Energy Materials*, **2021**, 11, 2101926	21.8	10
391	Amorphizing metal-organic framework towards multifunctional polysulfide barrier for high-performance lithium-sulfur batteries. *Nano Energy*, **2021**, 86, 106094	17.1	27
390	Self-templated poly schiff base-Fe derived Fe-N co-doped porous carbon nanosheets for efficient electrocatalysis. *Chemical Engineering Journal*, **2021**, 430, 132315	14.7	0
389	Precise synthesis of Fe□2 with N vacancies coordination for boosting electrochemical artificial N2 fixation. *Applied Catalysis B: Environmental*, **2021**, 293, 120216	21.8	12
388	The role of artificial intelligence in the mass adoption of electric vehicles. *Joule*, **2021**, 5, 2296-2322	27.8	14
387	Densely accessible Fe-Nx active sites decorated mesoporous-carbon-spheres for oxygen reduction towards high performance aluminum-air flow batteries. *Applied Catalysis B: Environmental*, **2021**, 293, 120176	21.8	21
386	Engineering Oversaturated Fe-N Multifunctional Catalytic Sites for Durable Lithium-Sulfur Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 26622-26629	16.4	23
385	Defect engineering on three-dimensionally ordered macroporous phosphorus doped Co3O4□ microspheres as an efficient bifunctional electrocatalyst for Zn-air batteries. *Energy Storage Materials*, **2021**, 41, 427-435	19.4	9
384	Self-assembly of colloidal MOFs derived yolk-shelled microcages as flexible air cathode for rechargeable Zn-air batteries. *Nano Energy*, **2021**, 89, 106314	17.1	9
383	From bulk to interface: electrochemical phenomena and mechanism studies in batteries electrochemical quartz crystal microbalance. *Chemical Society Reviews*, **2021**, 50, 10743-10763	58.5	9

382	Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a High-Efficiency Lithium Polysulfide Conversion Process. *Angewandte Chemie - International Edition*, **2021**, 60, 2371-2378	16.4	78
381	Recent Progress on High-Performance Cathode Materials for Zinc-Ion Batteries. *Small Structures*, **2021**, 2, 2000064	8.7	36
380	Two-dimensional Materials for all-solid-state Lithium Batteries.. *Advanced Materials*, **2021**, e2108079	24	8
379	Thin Film Polyamide Nanocomposite Membrane Decorated by Polyphenol-Assisted TiCT MXene Nanosheets for Reverse Osmosis.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	3
378	Preferentially Engineering FeN Edge Sites onto Graphitic Nanosheets for Highly Active and Durable Oxygen Electrocatalysis in Rechargeable Zn-Air Batteries. *Advanced Materials*, **2020**, 32, e2004900	24	94
377	Three-Dimensional Modeling of All-Solid-State Lithium-Ion Batteries Using Synchrotron Transmission X-ray Microscopy Tomography. *Journal of the Electrochemical Society*, **2020**, 167, 100558	3.9	14
376	Insights into Multiphase Reactions during Self-Discharge of Li-S Batteries. *Chemistry of Materials*, **2020**, 32, 4518-4526	9.6	23
375	Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO Reduction. *Angewandte Chemie - International Edition*, **2020**, 59, 12860-12867	16.4	37
374	Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO2 Reduction. *Angewandte Chemie*, **2020**, 132, 12960-12967	3.6	6
373	Reviving zinc-air batteries with high-density metal particles on carbon. *Science Bulletin*, **2020**, 65, 1511-1513	16.6	3
372	Two-Dimensional NiO@C-N Nanosheets Composite as a Superior Low-Temperature Anode Material for Advanced Lithium-/Sodium-Ion Batteries. *ChemElectroChem*, **2020**, 7, 3616-3622	4.3	8
371	High Voltage Stability and Characterization of P2-Na0.66Mn1-yMgyO2 Cathode for Sodium-Ion Batteries. *ChemElectroChem*, **2020**, 7, 3284-3290	4.3	5
370	Graphene Quantum Dots-Based Advanced Electrode Materials: Design, Synthesis and Their Applications in Electrochemical Energy Storage and Electrocatalysis. *Advanced Energy Materials*, **2020**, 10, 2001275	21.8	52
369	Revealing the Rapid Electrocatalytic Behavior of Ultrafine Amorphous Defective NbO Nanocluster toward Superior Li-S Performance. *ACS Nano*, **2020**, 14, 4849-4860	16.7	111
368	Three-dimensionally ordered macro-microporous metal organic frameworks with strong sulfur immobilization and catalyzation for high-performance lithium-sulfur batteries. *Nano Energy*, **2020**, 72, 104685	17.1	83
367	Na2CoPO4F as a pseudocapacitive anode for high-performance and ultrastable hybrid sodium-ion capacitors. *Electrochimica Acta*, **2020**, 342, 136024	6.7	6
366	Supramolecular preorganization effect to access single cobalt sites for enhanced photocatalytic hydrogen evolution and nitrogen fixation. *Chemical Engineering Journal*, **2020**, 394, 124822	14.7	9
365	Constructing Safe and Durable High-Voltage P2 Layered Cathodes for Sodium Ion Batteries Enabled by Molecular Layer Deposition of Alucone. *Advanced Functional Materials*, **2020**, 30, 1910251	15.6	24

364	Superior performance of anion exchange membrane water electrolyzer: Ensemble of producing oxygen vacancies and controlling mass transfer resistance. *Applied Catalysis B: Environmental*, **2020**, 278, 119276	21.8	32
363	Tantalum-Based Electrocatalyst for Polysulfide Catalysis and Retention for High-Performance Lithium-Sulfur Batteries. *Matter*, **2020**, 3, 920-934	12.7	55
362	Consolidating Lithiothermic-Ready Transition Metals for Li S-Based Cathodes. *Advanced Materials*, **2020**, 32, e2002403	24	34
361	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. *Nature Reviews Materials*, **2020**, 5, 276-294	73.3	151
360	Fast production of zinc–hexamethylenetetramine complex microflowers as an advanced sulfur reservoir for high-performance lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2020**, 8, 5062-5069	13	7
359	Cationic and anionic redox in lithium-ion based batteries. *Chemical Society Reviews*, **2020**, 49, 1688-1705	58.5	84
358	Atomic scale manipulation of sublayer with functional TiO2 nanofilm toward high-performance reverse osmosis membrane. *Desalination*, **2020**, 480, 114342	10.3	14
357	Ni-Rich/Co-Poor Layered Cathode for Automotive Li-Ion Batteries: Promises and Challenges. *Advanced Energy Materials*, **2020**, 10, 1903864	21.8	119
356	Template-guided synthesis of Co nanoparticles embedded in hollow nitrogen doped carbon tubes as a highly efficient catalyst for rechargeable Zn-air batteries. *Nano Energy*, **2020**, 71, 104592	17.1	92
355	Recycling of mixed cathode lithium-ion batteries for electric vehicles: Current status and future outlook **2020**, 2, 6-43		136
354	Lithium-Sulfur Batteries: Low-Bandgap Se-Deficient Antimony Selenide as a Multifunctional Polysulfide Barrier toward High-Performance Lithium–Sulfur Batteries (Adv. Mater. 4/2020). *Advanced Materials*, **2020**, 32, 2070030	24	4
353	Advanced Electrode Materials Comprising of Structure-Engineered Quantum Dots for High-Performance Asymmetric Micro-Supercapacitors. *Advanced Energy Materials*, **2020**, 10, 1903724	21.8	23
352	Polysulfide Regulation by the Zwitterionic Barrier toward Durable Lithium-Sulfur Batteries. *Journal of the American Chemical Society*, **2020**, 142, 3583-3592	16.4	95
351	Boosting the Heat Dissipation Performance of Graphene/Polyimide Flexible Carbon Film via Enhanced Through-Plane Conductivity of 3D Hybridized Structure. *Small*, **2020**, 16, e1903315	11	23
350	A fundamental understanding of the Fe/Ti doping induced structure formation process to realize controlled synthesis of layer-tunnel Na0.6MnO2 cathode. *Nano Energy*, **2020**, 70, 104539	17.1	16
349	Hierarchical Defective Fe3-xC@C Hollow Microsphere Enables Fast and Long-Lasting Lithium–Sulfur Batteries. *Advanced Functional Materials*, **2020**, 30, 2001165	15.6	85
348	Enhancing Oxygen Reduction Activity of Pt-based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. *Angewandte Chemie*, **2020**, 132, 18490-18504	3.6	5
347	Enhancing Oxygen Reduction Activity of Pt-based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. *Angewandte Chemie - International Edition*, **2020**, 59, 18334-18348	16.4	73

346	Nickel-based Cathode for Li-ion Batteries **2020**, 204-226		
345	Lithium‐Sulfur Batteries: Hierarchical Defective Fe 3- x C@C Hollow Microsphere Enables Fast and Long-Lasting Lithium‐Sulfur Batteries (Adv. Funct. Mater. 22/2020). *Advanced Functional Materials*, **2020**, 30, 2070142	15.6	
344	New Concepts in Electrolytes. *Chemical Reviews*, **2020**, 120, 6783-6819	68.1	267
343	Low-Bandgap Se-Deficient Antimony Selenide as a Multifunctional Polysulfide Barrier toward High-Performance Lithium-Sulfur Batteries. *Advanced Materials*, **2020**, 32, e1904876	24	120
342	Relating Catalysis between Fuel Cell and Metal-Air Batteries. *Matter*, **2020**, 2, 32-49	12.7	61
341	NbOx nano-nail with a Pt head embedded in carbon as a highly active and durable oxygen reduction catalyst. *Nano Energy*, **2020**, 69, 104455	17.1	18
340	Hierarchically Porous Multimetal-Based Carbon Nanorod Hybrid as an Efficient Oxygen Catalyst for Rechargeable Zinc‐Air Batteries. *Advanced Functional Materials*, **2020**, 30, 1908167	15.6	56
339	Evidence for interfacial geometric interactions at metal‐support interfaces and their influence on the electroactivity and stability of Pt nanoparticles. *Journal of Materials Chemistry A*, **2020**, 8, 1368-1377	13	10
338	A Triphasic Bifunctional Oxygen Electrocatalyst with Tunable and Synergetic Interfacial Structure for Rechargeable Zn-Air Batteries. *Advanced Energy Materials*, **2020**, 10, 1903003	21.8	42
337	Engineering the Conductive Network of Metal Oxide-Based Sulfur Cathode toward Efficient and Longevous Lithium‐Sulfur Batteries. *Advanced Energy Materials*, **2020**, 10, 2002076	21.8	60
336	Breaking Free from Cobalt Reliance in Lithium-Ion Batteries. *IScience*, **2020**, 23, 101505	6.1	30
335	Soft on rigid‐nanohybrid as the self-supporting multifunctional cathode electrocatalyst for high-performance lithium-polysulfide batteries. *Nano Energy*, **2020**, 78, 105293	17.1	21
334	Fast Charging Li-Ion Batteries for a New Era of Electric Vehicles. *Cell Reports Physical Science*, **2020**, 1, 100212	6.1	22
333	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. *Chemical Society Reviews*, **2020**, 49, 5407-5445	58.5	121
332	A Near-Isotropic Proton-Conducting Porous Graphene Oxide Membrane. *ACS Nano*, **2020**, 14, 14947-14956	13.7	5
331	d-Orbital steered active sites through ligand editing on heterometal imidazole frameworks for rechargeable zinc-air battery. *Nature Communications*, **2020**, 11, 5858	17.4	49
330	Deep-Breathing Honeycomb-like Co-N-C Nanopolyhedron Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. *IScience*, **2020**, 23, 101404	6.1	24
329	Direct Observation of Defect-Aided Structural Evolution in a Nickel-Rich Layered Cathode. *Angewandte Chemie*, **2020**, 132, 22276-22283	3.6	10

328	A Combined Ordered Macro-Mesoporous Architecture Design and Surface Engineering Strategy for High-Performance Sulfur Immobilizer in Lithium-Sulfur Batteries. *Small*, **2020**, 16, e2001089	11	27
327	R□ktitelbild: Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO2 Reduction (Angew. Chem. 31/2020). *Angewandte Chemie*, **2020**, 132, 13224-13224	3.6	
326	Decoupled low-cost ammonium-based electrolyte design for highly stable zinc□bdine redox flow batteries. *Energy Storage Materials*, **2020**, 32, 465-476	19.4	15
325	Space-confined catalyst design toward ultrafine Pt nanoparticles with enhanced oxygen reduction activity and durability. *Journal of Power Sources*, **2020**, 473, 228607	8.9	10
324	Direct Observation of Defect-Aided Structural Evolution in a Nickel-Rich Layered Cathode. *Angewandte Chemie - International Edition*, **2020**, 59, 22092-22099	16.4	30
323	Ultrafine, high-loading and oxygen-deficient cerium oxide embedded on mesoporous carbon nanosheets for superior lithium□oxygen batteries. *Nano Energy*, **2020**, 71, 104570	17.1	17
322	Tensile-strained ruthenium phosphide by anion substitution for highly active and durable hydrogen evolution. *Nano Energy*, **2020**, 77, 105212	17.1	14
321	Regulating the Li -Solvation Structure of Ester Electrolyte for High-Energy-Density Lithium Metal Batteries. *Small*, **2020**, 16, e2004688	11	15
320	A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. *Chemical Society Reviews*, **2020**, 49, 8790-8839	58.5	153
319	Manipulating Au-CeO Interfacial Structure Toward Ultrahigh Mass Activity and Selectivity for CO Reduction. *ChemSusChem*, **2020**, 13, 6621-6628	8.3	7
318	Engineering Solvation Complex-Membrane Interaction to Suppress Cation Crossover in 3 V Cu-Al Battery. *Small*, **2020**, 16, e2003438	11	3
317	Biomass-derived nitrogen-doped hierarchical porous carbon as efficient sulfur host for lithium□ulfur batteries. *Journal of Energy Chemistry*, **2020**, 44, 61-67	12	70
316	Zwitterionic impetus on single lithium-ion conduction in solid polymer electrolyte for all-solid-state lithium-ion batteries. *Chemical Engineering Journal*, **2020**, 384, 123237	14.7	24
315	TiC supported amorphous MnOx as highly efficient bifunctional electrocatalyst for corrosion resistant oxygen electrode of Zn-air batteries. *Nano Energy*, **2020**, 67, 104208	17.1	53
314	The Current State of Aqueous Zn-Based Rechargeable Batteries. *ACS Energy Letters*, **2020**, 5, 1665-1675	20.1	127
313	Dynamic electrocatalyst with current-driven oxyhydroxide shell for rechargeable zinc-air battery. *Nature Communications*, **2020**, 11, 1952	17.4	93
312	A 'trimurti' heterostructured hybrid with an intimate CoO/CoxP interface as a robust bifunctional air electrode for rechargeable Zn□ir batteries. *Journal of Materials Chemistry A*, **2020**, 8, 9177-9184	13	39
311	Bioinspired Graphene Oxide Membranes with Dual Transport Mechanisms for Precise Molecular Separation. *Advanced Functional Materials*, **2019**, 29, 1905229	15.6	43

310	Rational design of tailored porous carbon-based materials for CO2 capture. *Journal of Materials Chemistry A*, **2019**, 7, 20985-21003	13	84
309	Nitrogen-doped graphene-TiO N nanocomposite electrode for highly efficient capacitive deionization.. *RSC Advances*, **2019**, 9, 28186-28193	3.7	7
308	Carbon-pore-sheathed cobalt nanoseeds: An exceptional and durable bifunctional catalyst for zinc-air batteries. *Nano Energy*, **2019**, 65, 104051	17.1	33
307	Tailoring FeN4 Sites with Edge Enrichment for Boosted Oxygen Reduction Performance in Proton Exchange Membrane Fuel Cell. *Advanced Energy Materials*, **2019**, 9, 1803737	21.8	90
306	Metal-organic framework-derived Nickel Cobalt oxysulfide nanocages as trifunctional electrocatalysts for high efficiency power to hydrogen. *Nano Energy*, **2019**, 58, 680-686	17.1	50
305	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. *Angewandte Chemie*, **2019**, 131, 9742-9747	3.6	47
304	R□ktitelbild: A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction (Angew. Chem. 28/2019). *Angewandte Chemie*, **2019**, 131, 9750-9750	3.6	1
303	A 3D ordered hierarchically porous non-carbon electrode for highly effective and efficient capacitive deionization. *Journal of Materials Chemistry A*, **2019**, 7, 15633-15639	13	30
302	3D Nanowire Arrayed Cu Current Collector toward Homogeneous Alloying Anode Deposition for Enhanced Sodium Storage. *Advanced Energy Materials*, **2019**, 9, 1900673	21.8	21
301	Improved Composite Solid Electrolyte through Ionic Liquid-Assisted Polymer Phase for Solid-State Lithium Ion Batteries. *Journal of the Electrochemical Society*, **2019**, 166, A1785-A1792	3.9	14
300	Black BaTiO3 as multifunctional sulfur immobilizer for superior lithium sulfur batteries. *Journal of Power Sources*, **2019**, 434, 226729	8.9	22
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