Peng Tan

List of Publications by Year
in descending order

169 papers	7,227 citations	53794 45 h-index	74163 75 g-index
171 all docs	171 docs citations	171 times ranked	6793 citing authors

#	Article	IF	Citations
1	Flexible Znâ€“ and Liâ€“air batteries: recent advances, challenges, and future perspectives. Energy and Environmental Science, 2017, 10, 2056-2080.	30.8	477
2	Selfâ€Catalyzed Growth of Co, Nâ€Codoped CNTs on Carbonâ€Encased CoS_x Surface: A Nobleâ€Metalâ€Free Bifunctional Oxygen Electrocatalyst for Flexible Solid Znâ€“Air Batteries. Advanced Functional Materials, 2019, 29, 1904481.	14.9	217
3	Advances and challenges in lithium-air batteries. Applied Energy, 2017, 204, 780-806.	10.1	186
4	In-situ growth of Co3O4 nanowire-assembled clusters on nickel foam for aqueous rechargeable Zn-Co3O4 and Zn-air batteries. Applied Catalysis B: Environmental, 2019, 241, 104-112.	20.2	167
5	Fabrication of magnetically responsive HKUST-1/Fe3O4 composites by dry gel conversion for deep desulfurization and denitrogenation. Journal of Hazardous Materials, 2017, 321, 344-352.	12.4	165
6	First-Principles Study of Nitrogen-, Boron-Doped Graphene and Co-Doped Graphene as the Potential Catalysts in Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry C, 2016, 120, 6612-6618.	3.1	161
7	Metalâ€“Organic Frameworks with Targetâ€Specific Active Sites Switched by Photoresponsive Motifs: Efficient Adsorbents for Tailorable CO₂ Capture. Angewandte Chemie - International Edition, 2019, 58, 6600-6604.	13.8	161
8	Design and fabrication of nanoporous adsorbents for the removal of aromatic sulfur compounds. Journal of Materials Chemistry A, 2018, 6, 23978-24012.	10.3	147
9	A nano-structured RuO₂/NiO cathode enables the operation of non-aqueous lithiumâ€“air batteries in ambient air. Energy and Environmental Science, 2016, 9, 1783-1793.	30.8	142
10	Rechargeable alkaline zinc batteries: Progress and challenges. Energy Storage Materials, 2020, 31, 44-57.	18.0	139
11	Co₃O₄ Nanosheets as Active Material for Hybrid Zn Batteries. Small, 2018, 14, e1800225.	10.0	131
12	A high-rate and long cycle life solid-state lithiumâ€“air battery. Energy and Environmental Science, 2015, 8, 3745-3754.	30.8	129
13	Recent Advances in Perovskite Oxides as Electrode Materials for Nonaqueous Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2017, 7, 1602674.	19.5	129
14	Mini-review of perovskite oxides as oxygen electrocatalysts for rechargeable zincâ€“air batteries. Chemical Engineering Journal, 2020, 397, 125516.	12.7	121
15	A novel solid-state Liâ€“O₂ battery with an integrated electrolyte and cathode structure. Energy and Environmental Science, 2015, 8, 2782-2790.	30.8	111
16	Generation of Hierarchical Porosity in Metalâ€“Organic Frameworks by the Modulation of Cation Valence. Angewandte Chemie - International Edition, 2019, 58, 10104-10109.	13.8	104
17	The dual role of hydrogen peroxide in fuel cells. Science Bulletin, 2015, 60, 55-64.	9.0	98
18	Constructing a confined space in silica nanopores: an ideal platform for the formation and dispersion of cuprous sites. Journal of Materials Chemistry A, 2014, 2, 3399.	10.3	91

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19	What Matters to the Adsorptive Desulfurization Performance of Metal-Organic Frameworks?. Journal of Physical Chemistry C, 2015, 119, 21969-21977.	3.1	91
20	Modeling of lithium-sulfur batteries incorporating the effect of Li2S precipitation. Journal of Power Sources, 2016, 336, 115-125.	7.8	87
21	A high-performance Zn battery based on self-assembled nanostructured NiCo2O4 electrode. Journal of Power Sources, 2019, 421, 6-13.	7.8	87
22	Fabrication of magnetically responsive coreâ€“shell adsorbents for thiophene capture: AgNO3-functionalized Fe3O4@mesoporous SiO2 microspheres. Journal of Materials Chemistry A, 2014, 2, 4698.	10.3	86
23	Modeling of all porous solid oxide fuel cells. Applied Energy, 2018, 219, 105-113.	10.1	84
24	Rich atomic interfaces between sub-1 nm RuOx clusters and porous Co3O4 nanosheets boost oxygen electrocatalysis bifunctionality for advanced Zn-air batteries. Energy Storage Materials, 2020, 32, 20-29.	18.0	84
25	Functionalization of metalâ€“organic frameworks with cuprous sites using vapor-induced selective reduction: efficient adsorbents for deep desulfurization. Green Chemistry, 2016, 18, 3210-3215.	9.0	82
26	Mathematical modeling of an anion-exchange membrane water electrolyzer for hydrogen production. International Journal of Hydrogen Energy, 2014, 39, 19869-19876.	7.1	74
27	Maximizing Photoresponsive Efficiency by Isolating Metalâ€“Organic Polyhedra into Confined Nanoscaled Spaces. Journal of the American Chemical Society, 2019, 141, 8221-8227.	13.7	71
28	Integration of Znâ€“Ag and Znâ€“Air Batteries: A Hybrid Battery with the Advantages of Both. ACS Applied Materials & Interfaces, 2018, 10, 36873-36881.	8.0	70
29	Advances in modeling and simulation of Liâ€“air batteries. Progress in Energy and Combustion Science, 2017, 62, 155-189.	31.2	68
30	Hierarchical Nâ€doped carbons from designed Nâ€rich polymer: Adsorbents with a recordâ€high capacity for desulfurization. AICHE Journal, 2018, 64, 3786-3793.	3.6	64
31	MXene Quantum Dot/Polymer Hybrid Structures with Tunable Electrical Conductance and Resistive Switching for Nonvolatile Memory Devices. Advanced Electronic Materials, 2020, 6, 1900493.	5.1	63
32	Towards online optimisation of solid oxide fuel cell performance: Combining deep learning with multi-physics simulation. Energy and AI, 2020, 1, 100003.	10.6	61
33	A high-performance solid-state lithium-oxygen battery with a ceramic-carbon nanostructured electrode. Nano Energy, 2016, 26, 565-576.	16.0	60
34	MnO2-x nanosheets on stainless steel felt as a carbon- and binder-free cathode for non-aqueous lithium-oxygen batteries. Journal of Power Sources, 2016, 306, 724-732.	7.8	58
35	Mathematical modeling of alkaline direct ethanol fuel cells. International Journal of Hydrogen Energy, 2013, 38, 14067-14075.	7.1	57
36	In-situ observation of the gas evolution process on the air electrode of Zn-air batteries during charging. Chemical Engineering Journal, 2022, 427, 130862.	12.7	55

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37	A gradient porous cathode for non-aqueous lithium-air batteries leading to a high capacity. Electrochemistry Communications, 2014, 46, 111-114.	4.7	54
38	Achieving high energy density and efficiency through integration: progress in hybrid zinc batteries. Journal of Materials Chemistry A, 2019, 7, 15564-15574.	10.3	54
39	Magnetically Responsive Coreâ€“Shell Fe₃O₄@C Adsorbents for Efficient Capture of Aromatic Sulfur and Nitrogen Compounds. ACS Sustainable Chemistry and Engineering, 2016, 4, 2223-2231.	6.7	51
40	Toward a new generation of low cost, efficient, and durable metalâ€“air flow batteries. Journal of Materials Chemistry A, 2019, 7, 26744-26768.	10.3	51
41	Unraveling the Positive Roles of Point Defects on Carbon Surfaces in Nonaqueous Lithiumâ€“Oxygen Batteries. Journal of Physical Chemistry C, 2016, 120, 18394-18402.	3.1	50
42	Thermo-economic modeling and analysis of an NG-fueled SOFC-WGS-TSA-PEMFC hybrid energy conversion system for stationary electricity power generation. Energy, 2020, 192, 116613.	8.8	50
43	Controllable Adsorption of CO₂ on Smart Adsorbents: An Interplay between Amines and Photoresponsive Molecules. Chemistry of Materials, 2018, 30, 3429-3437.	6.7	49
44	Prediction of the theoretical capacity of non-aqueous lithium-air batteries. Applied Energy, 2013, 109, 275-282.	10.1	48
45	Performance analysis of a novel SOFC-HCCI engine hybrid system coupled with metal hydride reactor for H2 addition by waste heat recovery. Energy Conversion and Management, 2019, 191, 119-131.	9.2	48
46	Vertically aligned carbon nanotube-ruthenium dioxide core-shell cathode for non-aqueous lithium-oxygen batteries. Journal of Power Sources, 2016, 331, 82-90.	7.8	47
47	Syngas/power cogeneration from proton conducting solid oxide fuel cells assisted by dry methane reforming: A thermal-electrochemical modelling study. Energy Conversion and Management, 2018, 167, 37-44.	9.2	44
48	Engineering the interfaces in water-splitting photoelectrodes â€“ an overview of the technique development. Journal of Materials Chemistry A, 2020, 8, 6984-7002.	10.3	44
49	Tailoring charge and mass transport in cation/anion-codoped Ni3N / N-doped CNT integrated electrode toward rapid oxygen evolution for fast-charging zinc-air batteries. Energy Storage Materials, 2021, 39, 11-20.	18.0	44
50	Insights into the Thermopower of Thermally Regenerative Electrochemical Cycle for Low Grade Heat Harvesting. ACS Energy Letters, 2021, 6, 329-336.	17.4	43
51	A facile approach for preparation of highly dispersed platinum-copper/carbon nanocatalyst toward formic acid electro-oxidation. Electrochimica Acta, 2016, 190, 956-963.	5.2	42
52	Investigation on the electrode design of hybrid Zn-Co3O4/air batteries for performance improvements. Electrochimica Acta, 2018, 283, 1028-1036.	5.2	42
53	Effects of moist air on the cycling performance of non-aqueous lithium-air batteries. Applied Energy, 2016, 182, 569-575.	10.1	41
54	Dynamic modeling and operation strategy of an NG-fueled SOFC-WGS-TSA-PEMFC hybrid energy conversion system for fuel cell vehicle by using MATLAB/SIMULINK. Energy, 2019, 175, 567-579.	8.8	41

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55	Fabrication of Microporous Metalâ€“Organic Frameworks in Uninterrupted Mesoporous Tunnels: Hierarchical Structure for Efficient Trypsin Immobilization and Stabilization. Angewandte Chemie - International Edition, 2020, 59, 6428-6434.	13.8	41
56	A RuO₂ nanoparticle-decorated buckypaper cathode for non-aqueous lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 19042-19049.	10.3	40
57	Coreâ€“Shell AgCl@SiO₂ Nanoparticles: Ag(I)-Based Antibacterial Materials with Enhanced Stability. ACS Sustainable Chemistry and Engineering, 2016, 4, 3268-3275.	6.7	40
58	Controlled Construction of Supported Cu⁺ Sites and Their Stabilization in MIL-100(Fe): Efficient Adsorbents for Benzothiophene Capture. ACS Applied Materials & Interfaces, 2017, 9, 29445-29450.	8.0	40
59	Thermal modelling of ethanol-fuelled Solid Oxide Fuel Cells. Applied Energy, 2019, 237, 476-486.	10.1	39
60	Mathematical modeling and numerical analysis of alkaline zinc-iron flow batteries for energy storage applications. Chemical Engineering Journal, 2021, 405, 126684.	12.7	39
61	Fast fiber-optic multi-wavelength pyrometer. Review of Scientific Instruments, 2011, 82, 064902.	1.3	38
62	Experimental and modeling study of high performance direct carbon solid oxide fuel cell with in situ catalytic steam-carbon gasification reaction. Journal of Power Sources, 2018, 382, 135-143.	7.8	38
63	Interfacial La Diffusion in the CeO₂/LaFeO₃ Hybrid for Enhanced Oxygen Evolution Activity. ACS Applied Materials & Interfaces, 2021, 13, 2799-2806.	8.0	38
64	A carbon powder-nanotube composite cathode for non-aqueous lithium-air batteries. Electrochimica Acta, 2014, 147, 1-8.	5.2	37
65	Performance improvement of a direct carbon solid oxide fuel cell system by combining with a Stirling cycle. Energy, 2017, 140, 979-987.	8.8	37
66	Discharge product morphology versus operating temperature in non-aqueous lithium-air batteries. Journal of Power Sources, 2015, 278, 133-140.	7.8	36
67	Cost-effective carbon supported Fe2O3 nanoparticles as an efficient catalyst for non-aqueous lithium-oxygen batteries. Electrochimica Acta, 2016, 211, 545-551.	5.2	35
68	Nanoporous NiO/Ni(OH)₂Plates Incorporated with Carbon Nanotubes as Active Materials of Rechargeable Hybrid Zinc Batteries for Improved Energy Efficiency and High-Rate Capability. Journal of the Electrochemical Society, 2018, 165, A2119-A2126.	2.9	35
69	Fabrication of highly dispersed nickel in nanoconfined spaces of as-made SBA-15 for dry reforming of methane with carbon dioxide. Chemical Engineering Journal, 2020, 390, 124491.	12.7	35
70	Modeling of the mixed potential in hydrogen peroxide-based fuel cells. International Journal of Hydrogen Energy, 2014, 39, 7407-7416.	7.1	34
71	Performance improvement of a direct carbon solid oxide fuel cell through integrating an Otto heat engine. Energy Conversion and Management, 2018, 165, 761-770.	9.2	33
72	Selective adsorption and efficient regeneration via smart adsorbents possessing thermo-controlled molecular switches. Physical Chemistry Chemical Physics, 2016, 18, 9883-9887.	2.8	31

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73	Achieving a stable zinc electrode with ultralong cycle life by implementing a flowing electrolyte. Journal of Power Sources, 2020, 453, 227856.	7.8	31
74	Insight into the bubble-induced overpotential towards high-rate charging of Zn-air batteries. Chemical Engineering Journal, 2022, 448, 137782.	12.7	31
75	A non-carbon cathode electrode for lithiumâ€“oxygen batteries. Applied Energy, 2014, 130, 134-138.	10.1	29
76	Carbon electrode with NiO and RuO2 nanoparticles improves the cycling life of non-aqueous lithium-oxygen batteries. Journal of Power Sources, 2016, 326, 303-312.	7.8	29
77	Growth of Al and Co co-doped NiO nanosheets on carbon cloth as the air electrode for Zn-air batteries with high cycling stability. Electrochimica Acta, 2018, 290, 21-29.	5.2	29
78	Porous Co3O4 nanoplates as the active material for rechargeable Zn-air batteries with high energy efficiency and cycling stability. Energy, 2019, 166, 1241-1248.	8.8	29
79	Facile Synthesis of Ti₃C₂T_xâ€“Poly(vinylpyrrolidone) Nanocomposites for Nonvolatile Memory Devices with Low Switching Voltage. ACS Applied Materials & Interfaces, 2019, 11, 38061-38067.	8.0	28
80	Combined methane reforming by carbon dioxide and steam in proton conducting solid oxide fuel cells for syngas/power co-generation. International Journal of Hydrogen Energy, 2019, 44, 15313-15321.	7.1	28
81	Modeling of all-porous solid oxide fuel cells with a focus on the electrolyte porosity design. Applied Energy, 2019, 235, 602-611.	10.1	28
82	Microstructure-tuned cobalt oxide electrodes for high-performance Znâ€“Co batteries. Electrochimica Acta, 2020, 353, 136535.	5.2	28
83	Breathing Metalâ€“Organic Polyhedra Controlled by Light for Carbon Dioxide Capture and Liberation. CCS Chemistry, 2021, 3, 1659-1668.	7.8	28
84	A steady-state measurement system for total hemispherical emissivity. Measurement Science and Technology, 2012, 23, 025006.	2.6	27
85	Dynamic modeling and operation strategy of natural gas fueled SOFC-Engine hybrid power system with hydrogen addition by metal hydride for vehicle applications. ETransportation, 2020, 5, 100074.	14.8	27
86	Unravel the influences of Ni substitution on Co-based electrodes for rechargeable alkaline Znâ€“Co batteries. Journal of Power Sources, 2021, 483, 229192.	7.8	27
87	Tailoring structural properties of carbon via implanting optimal co nanoparticles in nâ€rich carbon cages toward highâ€efficiency oxygen electrocatalysis for rechargeable znâ€air batteries. , 2022, 4, 576-585.		27
88	Insight into potential oscillation behaviors during Zn electrodeposition: Mechanism and inspiration for rechargeable Zn batteries. Chemical Engineering Journal, 2022, 438, 135541.	12.7	27
89	Techno-economic evaluation and technology roadmap of the MWe-scale SOFC-PEMFC hybrid fuel cell system for clean power generation. Journal of Cleaner Production, 2020, 255, 120225.	9.3	26
90	A feasible way to handle the heat management of direct carbon solid oxide fuel cells. Applied Energy, 2018, 226, 881-890.	10.1	25

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91	Investigation on the Discharge and Charge Behaviors of Li-CO₂ Batteries with Carbon Nanotube Electrodes. ACS Sustainable Chemistry and Engineering, 2020, 8, 9742-9750.	6.7	25
92	Process-Oriented Smart Adsorbents: Tailoring the Properties Dynamically as Demanded by Adsorption/Desorption. Accounts of Chemical Research, 2022, 55, 75-86.	15.6	25
93	Smart adsorbents with reversible photo-regulated molecular switches for selective adsorption and efficient regeneration. Chemical Communications, 2016, 52, 11531-11534.	4.1	24
94	Rational design of thermo-responsive adsorbents: demand-oriented active sites for the adsorption of dyes. Chemical Communications, 2017, 53, 9538-9541.	4.1	24
95	Numerical investigations of effects of the interdigitated channel spacing on overall performance of vanadium redox flow batteries. Journal of Energy Storage, 2020, 32, 101781.	8.1	23
96	Enabling thermal-neutral electrolysis for CO2-to-fuel conversions with a hybrid deep learning strategy. Energy Conversion and Management, 2021, 230, 113827.	9.2	23
97	A novel design of solid oxide electrolyser integrated with magnesium hydride bed for hydrogen generation and storage â€“ A dynamic simulation study. Applied Energy, 2017, 200, 260-272.	10.1	22
98	Modeling of an aprotic Li-O2 battery incorporating multiple-step reactions. Applied Energy, 2017, 187, 706-716.	10.1	22
99	Synthesis of Ultrasmall NiCo₂O₄ Nanoparticle-Decorated N-Doped Graphene Nanosheets as an Effective Catalyst for Znâ€“Air Batteries. Energy & Fuels, 2021, 35, 14188-14196.	5.1	22
100	Photo-assisted non-aqueous lithium-oxygen batteries: Progress and prospects. Renewable and Sustainable Energy Reviews, 2020, 127, 109877.	16.4	22
101	Experimental research on the influence of surface conditions on the total hemispherical emissivity of iron-based alloys. Experimental Thermal and Fluid Science, 2012, 40, 159-167.	2.7	21
102	Total hemispherical radiation properties of oxidized nickel at high temperatures. Corrosion Science, 2014, 83, 272-280.	6.6	21
103	Fabrication of Adsorbents with Thermocontrolled Molecular Gates for Both Selective Adsorption and Efficient Regeneration. Advanced Materials Interfaces, 2016, 3, 1500829.	3.7	21
104	Exploring oxygen electrocatalytic activity and pseudocapacitive behavior of Co3O4 nanoplates in alkaline solutions. Electrochimica Acta, 2019, 310, 86-95.	5.2	21
105	Ruthenium dioxide-decorated carbonized tubular polypyrrole as a bifunctional catalyst for non-aqueous lithium-oxygen batteries. Electrochimica Acta, 2017, 257, 281-289.	5.2	20
106	The thermal effects of all porous solid oxide fuel cells. Journal of Power Sources, 2019, 440, 227102.	7.8	20
107	Realizing both selective adsorption and efficient regeneration using adsorbents with photo-regulated molecular gates. Chemical Communications, 2016, 52, 4006-4009.	4.1	19
108	Synthesis of Fe₂O₃ Nanoparticle-Decorated N-Doped Reduced Graphene Oxide as an Effective Catalyst for Zn-Air Batteries. Journal of the Electrochemical Society, 2019, 166, A616-A622.	2.9	19

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109	Methanol to power through high-efficiency hybrid fuel cell system: Thermodynamic, thermo-economic, and techno-economic (3T) analyses in Northwest China. Energy Conversion and Management, 2021, 232, 113899.	9.2	19
110	Constructing the Tripleâ€Phase Boundaries of Integrated Air Electrodes for Highâ€Performance Znâ€“Air Batteries. Advanced Materials Interfaces, 2021, 8, 2101256.	3.7	19
111	Unraveling the mechanism of non-uniform zinc deposition in rechargeable zinc-based batteries with vertical orientation. Chemical Engineering Journal, 2022, 431, 134032.	12.7	19
112	Morphology of the Discharge Product in Nonâ€aqueous Lithiumâ€“Oxygen Batteries: Furrowed Toroid Particles Correspond to a Lower Charge Voltage. Energy Technology, 2016, 4, 393-400.	3.8	18
113	Controllable construction of metalâ€“organic polyhedra in confined cavities via in situ site-induced assembly. Journal of Materials Chemistry A, 2017, 5, 5278-5282.	10.3	18
114	Making Porous Materials Respond to Visible Light. ACS Energy Letters, 2019, 4, 2656-2667.	17.4	18
115	Controllable CO₂ Capture in Metalâ€“Organic Frameworks: Making Targeted Active Sites Respond to Light. Industrial & Engineering Chemistry Research, 2020, 59, 21894-21900.	3.7	18
116	Metalâ€“Organic Frameworks with Targetâ€Specific Active Sites Switched by Photoresponsive Motifs: Efficient Adsorbents for Tailorable CO₂ Capture. Angewandte Chemie, 2019, 131, 6672-6676.	2.0	17
117	Hybridization with Ti₃C₂T_x MXene: An Effective Approach to Boost the Hydrothermal Stability and Catalytic Performance of Metalâ€“Organic Frameworks. Inorganic Chemistry, 2021, 60, 1380-1387.	4.0	17
118	Near-infrared light triggered release of ethane from a photothermal metal-organic framework. Chemical Engineering Journal, 2021, 420, 130490.	12.7	17
119	Transient Calorimetric Measurement Method for Total Hemispherical Emissivity. Journal of Heat Transfer, 2012, 134, .	2.1	16
120	Simultaneous fabrication of bifunctional Cu(<scp>i</scp>)/Ce(<scp>iv</scp>) sites in silica nanopores using a guests-redox strategy. RSC Advances, 2016, 6, 70446-70451.	3.6	16
121	Fabrication of Photothermal Silver Nanocube/ZIF-8 Composites for Visible-Light-Regulated Release of Propylene. ACS Applied Materials & Interfaces, 2019, 11, 29298-29304.	8.0	16
122	Integrated Porous Cathode made of Pure Perovskite Lanthanum Nickel Oxide for Nonaqueous Lithiumâ€“Oxygen Batteries. Energy Technology, 2015, 3, 1093-1100.	3.8	15
123	Magnetically responsive porous materials for efficient adsorption and desorption processes. Chinese Journal of Chemical Engineering, 2019, 27, 1324-1338.	3.5	15
124	Toward the rational design of cathode and electrolyte materials for aprotic Liâ€CO ₂ batteries: A numerical investigation. International Journal of Energy Research, 2020, 44, 496-507.	4.5	15
125	Cost evaluation and sensitivity analysis of the alkaline zinc-iron flow battery system for large-scale energy storage applications. Journal of Energy Storage, 2021, 44, 103327.	8.1	15
126	Numerical modeling of a cogeneration system based on a direct carbon solid oxide fuel cell and a thermophotovoltaic cell. Energy Conversion and Management, 2018, 171, 279-286.	9.2	14

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127	Ce-Doped Smart Adsorbents with Photoresponsive Molecular Switches for Selective Adsorption and Efficient Desorption. Engineering, 2020, 6, 569-576.	6.7	14
128	Smart adsorbents for CO2 capture: Making strong adsorption sites respond to visible light. Science China Materials, 2021, 64, 383-392.	6.3	14
129	Ultrafine Co-Doped NiO Nanoparticles Decorated on Carbon Nanotubes Improving the Electrochemical Performance and Cycling Stability of Liâ€“CO₂ Batteries. ACS Applied Energy Materials, 2021, 4, 11858-11866.	5.1	14
130	Facile Fabrication of AgCl Nanoparticles and Their Application in Adsorptive Desulfurization. Journal of Nanoscience and Nanotechnology, 2015, 15, 4373-4379.	0.9	13
131	Numerical investigation of a non-aqueous lithium-oxygen battery based on lithium superoxide as the discharge product. Applied Energy, 2017, 203, 254-266.	10.1	13
132	What is the ideal distribution of electrolyte inside cathode pores of non-aqueous lithium-air batteries?. Science Bulletin, 2015, 60, 975-976.	9.0	12
133	Generation of Hierarchical Porosity in Metalâ€“Organic Frameworks by the Modulation of Cation Valence. Angewandte Chemie, 2019, 131, 10210-10215.	2.0	12
134	Optimizing the charging protocol to address the self-discharge issues in rechargeable alkaline Zn-Co batteries. Applied Energy, 2022, 308, 118366.	10.1	12
135	Selfâ€Activated Formation of Hierarchical Co₃O₄ Nanoflakes with High Valenceâ€State Conversion Capability for Ultrahighâ€Capacity Znâ€“Co Batteries. Small, 2022, 18, e2107149.	10.0	12
136	Modelling of a hybrid system for on-site power generation from solar fuels. Applied Energy, 2019, 240, 709-718.	10.1	11
137	Elucidating the mechanism of discharge performance improvement in zinc-air flow batteries: A combination of experimental and modeling investigations. Journal of Energy Storage, 2021, 40, 102779.	8.1	11
138	Rechargeable aqueous Zn-LiMn2O4 hybrid batteries with high performance and safety for energy storage. Journal of Energy Storage, 2022, 45, 103744.	8.1	11
139	Parameciumâ€Like Iron Oxide Nanotubes as a Costâ€Efficient Catalyst for Nonaqueous Lithiumâ€Oxygen Batteries. Energy Technology, 2018, 6, 263-272.	3.8	10
140	Light-responsive adsorbents with tunable adsorbentâ€“adsorbate interactions for selective CO2 capture. Chinese Journal of Chemical Engineering, 2022, 42, 104-111.	3.5	10
141	Free-Standing Electrode of Coreâ€“Shell-Structured NiO@Co₃S₄ for High-Performance Hybrid Znâ€“Co/Air Batteries. Energy & Fuels, 2022, 36, 1121-1128.	5.1	10
142	In-situ observation of the Zn electrodeposition on the planar electrode in the alkaline electrolytes with different viscosities. Electrochimica Acta, 2022, 418, 140344.	5.2	10
143	Regulating the Interfacial Electron Density of La_{0.8}Sr_{0.2}Mn_{0.5}Co_{0.5}O₃/RuO_x for Efficient and Low-Cost Bifunctional Oxygen Electrocatalysts and Rechargeable Zn-Air Batteries. ACS Applied Materials & Interfaces, 2021, 13, 61098-61106.	8.0	10
144	Significant Decrease in Activation Temperature for the Generation of Strong Basicity: A Strategy of Endowing Supports with Reducibility. Inorganic Chemistry, 2019, 58, 8003-8011.	4.0	9

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145	Investigation on the Strategies for Discharge Capacity Improvement of Aprotic Li-CO₂ Batteries. Energy & Fuels, 2020, 34, 16870-16878.	5.1	9
146	Revealing the effects of conductive carbon materials on the cycling stability of rechargeable Znâ€air batteries. International Journal of Energy Research, 2022, 46, 7694-7703.	4.5	9
147	Cation-Substitution-Tuned Oxygen Electrocatalyst of Spinel Cobaltite MCo₂O₄ (M = Fe, Co, and Ni) Hexagonal Nanoplates for Rechargeable Zn-Air Batteries. Journal of the Electrochemical Society, 2019, 166, A3448-A3455.	2.9	8
148	Amine-incorporated adsorbents with reversible sites and high amine efficiency for CO2 capture in wet environment. Separation and Purification Technology, 2022, 293, 121111.	7.9	8
149	A zinc-air battery capable of working in anaerobic conditions and fast environmental energy harvesting. Cell Reports Physical Science, 2022, 3, 100904.	5.6	8
150	New nitrogen-doped graphitic carbon nanosheets with rich structural defects and hierarchical nanopores as efficient metal-free electrocatalysts for oxygen reduction reaction in Zn-Air batteries. Chemical Engineering Science, 2022, 259, 117816.	3.8	8
151	Elucidating the performance variations and critical issues of Zn electrodes in different types of aqueous electrolytes for Zn-based rechargeable batteries. Electrochimica Acta, 2022, 425, 140702.	5.2	8
152	Simultaneous measurements of high-temperature total hemispherical emissivity and thermal conductivity using a steady-state calorimetric technique. Measurement Science and Technology, 2015, 26, 015003.	2.6	7
153	Fabrication of multifunctional integrated catalysts by decorating confined Ag nanoparticles on magnetic nanostirring bars. Journal of Colloid and Interface Science, 2019, 555, 315-322.	9.4	7
154	Revealing the Effects of Structure Design and Operating Protocols on the Electrochemical Performance of Rechargeable Zn-Air Batteries. Journal of the Electrochemical Society, 2021, 168, 100510.	2.9	7
155	Smart Light-responsive CO₂ Adsorbents for Regulating Strong Active Sites. Acta Chimica Sinica, 2020, 78, 1082.	1.4	7
156	Modulating the Activity of Enzyme in Metalâ€“Organic Frameworks Using the Photothermal Effect of Ti₃C₂ Nanosheets. ACS Applied Materials & Interfaces, 2022, 14, 30090-30098.	8.0	7
157	Investigation on the electrochemical performance of hybrid zinc batteries through numerical analysis. Electrochimica Acta, 2021, 375, 137967.	5.2	6
158	Mathematical modeling and numerical analysis of the discharge process of an alkaline zinc-cobalt battery. Journal of Energy Storage, 2020, 30, 101432.	8.1	6
159	Microscale-decoupled charge-discharge reaction sites for an air electrode with abundant triple-phase boundary and enhanced cycle stability of Zn-Air batteries. Journal of Power Sources, 2022, 525, 231108.	7.8	6
160	Fabrication of Microporous Metalâ€“Organic Frameworks in Uninterrupted Mesoporous Tunnels: Hierarchical Structure for Efficient Trypsin Immobilization and Stabilization. Angewandte Chemie, 2020, 132, 6490-6496.	2.0	5
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