Hongwei Mi

List of Publications by Year
in descending order

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89	4,021	117453	128067
papers	citations	34 h-index	60 g-index

93	93	93	4607
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scalable 2D Hierarchical Porous Carbon Nanosheets for Flexible Supercapacitors with Ultrahigh Energy Density. Advanced Materials, 2018, 30, 1706054.	11.1	405
2	Robust SnO_{2â^'x} Nanoparticleâ€Impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 8901-8905.	7.2	252
3	Understanding the Design Principles of Advanced Aqueous Zincâ€Ion Battery Cathodes: From Transport Kinetics to Structural Engineering, and Future Perspectives. Advanced Energy Materials, 2020, 10, 2002354.	10.2	193
4	New Strategy for Polysulfide Protection Based on Atomic Layer Deposition of TiO₂ onto Ferroelectricâ€Encapsulated Cathode: Toward Ultrastable Freeâ€Standing Room Temperature Sodiumâ€“Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1705537.	7.8	167
5	Nanostructured photocatalysts for nitrogen fixation. Nano Energy, 2020, 71, 104645.	8.2	120
6	A New Insight into Ultrastable Zn Metal Batteries Enabled by In Situ Built Multifunctional Metallic Interphase. Advanced Functional Materials, 2022, 32, 2109749.	7.8	113
7	Oxygen-doped crystalline carbon nitride with greatly extended visible-light-responsive range for photocatalytic H2 generation. Applied Catalysis B: Environmental, 2021, 283, 119636.	10.8	111
8	Ultrathin MoS2 anchored on 3D carbon skeleton containing SnS quantum dots as a high-performance anode for advanced lithium ion batteries. Chemical Engineering Journal, 2021, 403, 126251.	6.6	105
9	Construction of K⁺ Ion Gradient in Crystalline Carbon Nitride to Accelerate Exciton Dissociation and Charge Separation for Visible Light H₂ Production. ACS Catalysis, 2021, 11, 6995-7005.	5.5	100
10	Hierarchical hollow carbon spheres: Novel synthesis strategy, pore structure engineering and application for micro-supercapacitor. Carbon, 2020, 157, 70-79.	5.4	97
11	Hollow Co3S4/C anchored on nitrogen-doped carbon nanofibers as a free-standing anode for high-performance Li-ion batteries. Electrochimica Acta, 2019, 299, 173-181.	2.6	81
12	Novel Concept of Separator Design: Efficient Ions Transport Modulator Enabled by Dualâ€Interface Engineering Toward Ultraâ€Stable Zn Metal Anodes. Advanced Functional Materials, 2022, 32, .	7.8	79
13	A self-sacrifice template strategy to fabricate yolk-shell structured silicon@void@carbon composites for high-performance lithium-ion batteries. Chemical Engineering Journal, 2018, 351, 103-109.	6.6	78
14	Atomic layer deposition-enabled ultrastable freestanding carbon-selenium cathodes with high mass loading for sodium-selenium battery. Nano Energy, 2018, 43, 317-325.	8.2	76
15	Constructing a tunable defect structure in TiO₂ for photocatalytic nitrogen fixation. Journal of Materials Chemistry A, 2020, 8, 334-341.	5.2	73
16	Recent Progress in 2D Catalysts for Photocatalytic and Electrocatalytic Artificial Nitrogen Reduction to Ammonia. Advanced Energy Materials, 2021, 11, 2003294.	10.2	73
17	Rational design of positive-hexagon-shaped two-dimensional ZIF-derived materials as improved bifunctional oxygen electrocatalysts for use as long-lasting rechargeable Znâ€“Air batteries. Applied Catalysis B: Environmental, 2019, 256, 117871.	10.8	70
18	CoO-Co 3 O 4 heterostructure nanoribbon/RGO sandwich-like composites as anode materials for high performance lithium-ion batteries. Electrochimica Acta, 2017, 241, 252-260.	2.6	69

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19	In-Plane Charge Transport Dominates the Overall Charge Separation and Photocatalytic Activity in Crystalline Carbon Nitride. ACS Catalysis, 2022, 12, 4648-4658.	5.5	69
20	Three-dimensional network structure of silicon-graphene-polyaniline composites as high performance anodes for Lithium-ion batteries. Electrochimica Acta, 2016, 190, 1032-1040.	2.6	68
21	Insitu coating of nitrogen-doped graphene-like nanosheets on silicon as a stable anode for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 11254-11260.	5.2	62
22	Amorphous MoS3 decoration on 2D functionalized MXene as a bifunctional electrode for stable and robust lithium storage. Chemical Engineering Journal, 2021, 406, 126775.	6.6	59
23	Functionalized carbon nanofiber interlayer towards dendrite-free, Zn-ion batteries. Chemical Engineering Journal, 2021, 425, 131862.	6.6	53
24	Robust SnO_{2â^'x} Nanoparticleâ€Impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodiumâ€Ion Batteries. Angewandte Chemie, 2018, 130, 9039-9043.	1.6	50
25	PdNi alloy decorated 3D hierarchicallyÂN, S co-doped macroâ€“mesoporous carbon composites as efficient free-standing and binder-free catalysts for Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2018, 6, 10856-10867.	5.2	47
26	[BMIM]BF₄-modified PVDF-HFP composite polymer electrolyte for high-performance solid-state lithium metal battery. Journal of Materials Chemistry A, 2020, 8, 20593-20603.	5.2	47
27	PVDF-HFP based polymer electrolytes with high Li+ transference number enhancing the cycling performance and rate capability of lithium metal batteries. Applied Surface Science, 2022, 574, 151593.	3.1	46
28	Air plasma etching towards rich active sites in Fe/N-porous carbon for the oxygen reduction reaction with superior catalytic performance. Journal of Materials Chemistry A, 2017, 5, 16605-16610.	5.2	45
29	Fast ion diffusion kinetics based on ferroelectric and piezoelectric effect of SnO2/BaTiO3 heterostructures for high-rate sodium storage. Nano Energy, 2021, 90, 106591.	8.2	42
30	A Highly Sensitive Glucose Biosensor Based on Gold Nanoparticles/Bovine Serum Albumin/Fe3O4 Biocomposite Nanoparticles. Electrochimica Acta, 2016, 222, 1709-1715.	2.6	40
31	Fluoroethylene carbonate-Li-ion enabling composite solid-state electrolyte and lithium metal interface self-healing for dendrite-free lithium deposition. Chemical Engineering Journal, 2021, 408, 127254.	6.6	39
32	Self-healing silicon-sodium alginate-polyaniline composites originated from the enhancement hydrogen bonding for lithium-ion battery: A combined simulation and experiment study. Journal of Power Sources, 2019, 412, 749-758.	4.0	38
33	Free-standing ZIF-8 derived nitrogen and sulfur co-doped porous carbon nanofibers host for high mass loading lithium-sulfur battery. Applied Surface Science, 2020, 509, 145270.	3.1	38
34	Toward reversible wide-temperature Zn storage by regulating the electrolyte solvation structure via trimethyl phosphate. Chemical Engineering Journal, 2022, 449, 137843.	6.6	38
35	A unique morphology and interface dual-engineering strategy enables the holey C@VO₂ cathode with enhanced storage kinetics for aqueous Zn-ion batteries. Journal of Materials Chemistry A, 2021, 9, 8792-8804.	5.2	37
36	Coâ€“Moâ€“P carbon nanospheres derived from metalâ€“organic frameworks as a high-performance electrocatalyst towards efficient water splitting. Journal of Materials Chemistry A, 2021, 9, 1143-1149.	5.2	36

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37	Atomic layer deposition of amorphous oxygen-deficient TiO2-x on carbon nanotubes as cathode materials for lithium-air batteries. Journal of Power Sources, 2017, 360, 215-220.	4.0	34
38	Long cyclic stability of acidic aqueous zinc-ion batteries achieved by atomic layer deposition: the effect of the induced orientation growth of the Zn anode. Nanoscale, 2021, 13, 12223-12232.	2.8	33
39	ZIF-derived â€œsenbeiâ€•like Co₉S₈/CeO₂/Co heterostructural nitrogen-doped carbon nanosheets as bifunctional oxygen electrocatalysts for Zn-air batteries. Nanoscale, 2021, 13, 3227-3236.	2.8	33
40	High-efficiency core-shell magnetic heavy-metal absorbents derived from spent-LiFePO4 Battery. Journal of Hazardous Materials, 2021, 402, 123583.	6.5	32
41	Heterostructured CoO-Co₃O₄nanoparticles anchored on nitrogen-doped hollow carbon spheres as cathode catalysts for Liâ€“O₂batteries. Nanoscale, 2019, 11, 14769-14776.	2.8	31
42	Plasma enhanced atomic-layer-deposited nickel oxide on Co3O4 arrays as highly active electrocatalyst for oxygen evolution reaction. Journal of Power Sources, 2021, 481, 228925.	4.0	31
43	Nitrogen-doped CoOx/carbon nanotubes derived by plasma-enhanced atomic layer deposition: Efficient bifunctional electrocatalyst for oxygen reduction and evolution reactions. Electrochimica Acta, 2019, 296, 964-971.	2.6	30
44	In situ nitrogen doping of TiO₂ by plasma enhanced atomic layer deposition for enhanced sodium storage performance. Dalton Transactions, 2017, 46, 13101-13107.	1.6	29
45	N-Doped porous tremella-like Fe₃C/C electrocatalysts derived from metalâ€“organic frameworks for oxygen reduction reaction. Dalton Transactions, 2020, 49, 797-807.	1.6	29
46	Low-temperature thermal stabilization of polyacrylontrile-based precursor fibers towards efficient preparation of carbon fibers with improved mechanical properties. Polymer, 2015, 76, 131-139.	1.8	28
47	A CoO_x/FeO_x heterojunction on carbon nanotubes prepared by plasma-enhanced atomic layer deposition for the highly efficient electrocatalysis of oxygen evolution reactions. Journal of Materials Chemistry A, 2020, 8, 15140-15147.	5.2	27
48	Nb5+ doped LiV3O8 nanorods with extraordinary rate performance and cycling stability as cathodes for lithium-ion batteries. Electrochimica Acta, 2018, 284, 366-375.	2.6	26
49	Enhanced structural stability and overall conductivity of Li-rich layered oxide materials achieved by a dual electron/lithium-conducting coating strategy for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 23964-23972.	5.2	25
50	Anti-aggregation growth and hierarchical porous carbon encapsulation enables the C@VO2 cathode with superior storage capability for aqueous zinc-ion batteries. Journal of Energy Chemistry, 2022, 67, 645-654.	7.1	25
51	Oneâ€Step Synthesis of 3Dâ€Sandwiched Na₃V₂(PO₄)₂O₂F@rGO Composites as Cathode Material for Highâ€Rate Sodiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2593-2599.	1.7	23
52	Carbon nanotubes coupled with layered graphite to support SnTe nanodots as high-rate and ultra-stable lithium-ion battery anodes. Nanoscale, 2021, 13, 3782-3789.	2.8	23
53	A Tremella-Like Nanostructure of Silicon@void@graphene-Like Nanosheets Composite as an Anode for Lithium-Ion Batteries. Nanoscale Research Letters, 2016, 11, 204.	3.1	22
54	Bifunctional oxygen electrocatalysis on ultra-thin Co₉S₈/MnS carbon nanosheets for all-solid-state zincâ€“air batteries. Journal of Materials Chemistry A, 2021, 9, 22635-22642.	5.2	22

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55	Hydroxylamine mediated Fenton-like interfacial reaction dynamics on sea urchin-like catalyst derived from spent LiFePO4 battery. Journal of Hazardous Materials, 2022, 431, 128590.	6.5	22
56	Breaking the Limitation of Elevated Coulomb Interaction in Crystalline Carbon Nitride for Visible and Nearâ€Infrared Light Photoactivity. Advanced Science, 2022, 9, .	5.6	22
57	A lithium carboxylate grafted dendrite-free polymer electrolyte for an all-solid-state lithium-ion battery. Journal of Materials Chemistry A, 2019, 7, 25818-25823.	5.2	21
58	One-step rapid in-situ synthesis of nitrogen and sulfur co-doped three-dimensional honeycomb-ordered carbon supported PdNi nanoparticles as efficient electrocatalyst for oxygen reduction reaction in alkaline solution. Electrochimica Acta, 2017, 253, 445-454.	2.6	20
59	Boosting Na-ion diffusion by piezoelectric effect induced by alloying reaction of micro red-phosphorus/BaTiO3/graphene composite anode. Nano Energy, 2019, 66, 104136.	8.2	20
60	Co/CoP Nanoparticles Encapsulated Within N, P-Doped Carbon Nanotubes on Nanoporous Metal-Organic Framework Nanosheets for Oxygen Reduction and Oxygen Evolution Reactions. Nanoscale Research Letters, 2020, 15, 82.	3.1	20
61	Atomic layer deposition of TiO2 on nitrogen-doped carbon nanofibers supported Ru nanoparticles for flexible Li-O2 battery: A combined DFT and experimental study. Journal of Power Sources, 2017, 368, 88-96.	4.0	19
62	Nitrogen and sulfur co-doped graphene supported PdW alloys as highly active electrocatalysts for oxygen reduction reaction. International Journal of Hydrogen Energy, 2018, 43, 5530-5540.	3.8	15
63	Enhanced electrocatalytic performance of Fe-TiO2/N-doped graphene cathodes for rechargeable Li-O2 batteries. Journal of Solid State Electrochemistry, 2018, 22, 909-917.	1.2	14
64	Controlled synthesis and lithium storage performance of NiCo2O4/PPy composite materials. Journal of Physics and Chemistry of Solids, 2021, 148, 109761.	1.9	14
65	Cyanamide-defect-induced built-in electric field in crystalline carbon nitride for enhanced visible to near-infrared light photocatalytic activity. Inorganic Chemistry Frontiers, 2022, 9, 4320-4328.	3.0	14
66	Facile synthesis of a scale-like NiO/Ni composite anode with boosted electrochemical performance for lithium-ion batteries. Journal of Alloys and Compounds, 2021, 862, 158012.	2.8	13
67	Unveiling the reaction mechanism of an Sb₂S₃â€“Co₉S₈/NC anode for high-performance lithium-ion batteries. Nanoscale, 2021, 13, 20041-20051.	2.8	13
68	A carob-inspired nanoscale design of yolkâ€“shell Si@void@TiO₂-CNF composite as anode material for high-performance lithium-ion batteries. Dalton Transactions, 2019, 48, 6846-6852.	1.6	12
69	Converting Spent LiFePO₄ Battery into Zeolitic Phosphate for Highly Efficient Heavy Metal Adsorption. Inorganic Chemistry, 2021, 60, 9496-9503.	1.9	12
70	Donor Bandgap Engineering without Sacrificing the Reduction Ability of Photogenerated Electrons in Crystalline Carbon Nitride. ChemSusChem, 2021, 14, 4516-4524.	3.6	12
71	In situ coating of graphene-like sheets on Li4Ti5O12 particles for lithium-ion batteries. Electrochimica Acta, 2017, 230, 508-513.	2.6	11
72	Carbothermal Synthesis of Nitrogen-Doped Graphene Composites for Energy Conversion and Storage Devices. Frontiers in Chemistry, 2018, 6, 501.	1.8	11

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73	Free-Standing Selenium Impregnated Carbonized Leaf Cathodes for High-Performance Sodium-Selenium Batteries. Nanoscale Research Letters, 2019, 14, 30.	3.1	11
74	Construction of Defective Zincâ€“Cadmiumâ€“Sulfur Nanorods for Visibleâ€Lightâ€Driven Hydrogen Evolution Without the Use of Sacrificial Agents or Cocatalysts. ChemSusChem, 2020, 13, 756-762.	3.6	11
75	3D-ordered porous nitrogen and sulfur Co-Doped carbon supported PdCuW nanoparticles as efficient catalytic cathode materials for Li-O 2 batteries. Electrochimica Acta, 2018, 272, 33-43.	2.6	9
76	Donorâ€“Acceptor Cyanocarbazoleâ€Based Supramolecular Photocatalysts for Visibleâ€Lightâ€Driven H₂ Production. ChemSusChem, 2019, 12, 5070-5074.	3.6	9
77	Engineering hollow multi-shelled Co3O4 cubes to boost lithium storage performance. Applied Surface Science, 2021, 545, 149022.	3.1	9
78	Zeolitic-imidazolate frameworks-derived Co3S4/NiS@Ni foam heterostructure as highly efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 13616-13628.	3.8	9
79	LiFePO₄/RGO composites synthesized by a solid phase combined with carbothermal reduction method. Ferroelectrics, 2018, 528, 1-7.	0.3	7
80	Improving the structure stabilization of red phosphorus anodes via the shape memory effect of a Niâ€“Ti alloy for high-performance sodium ion batteries. Chemical Communications, 2019, 55, 4659-4662.	2.2	7
81	One-pot synthesis of N,S-doped pearl chain tube-loaded Ni3S2 composite materials for high-performance lithiumâ€“air batteries. Nanoscale, 2020, 12, 21770-21779.	2.8	7
82	An aqueous polyethylene oxide-based solid-state electrolyte with high voltage stability for dendrite-free lithium deposition via a self-healing electrostatic shield. Dalton Transactions, 2021, 50, 14296-14302.	1.6	7
83	Study of the microstructure and antibacterial properties of MgO with doped defects. Journal of Theoretical and Computational Chemistry, 2018, 17, 1850018.	1.8	6
84	Pyrimidine donor induced built-in electric field between melon chains in crystalline carbon nitride to facilitate excitons dissociation. Chinese Chemical Letters, 2023, 34, 107383.	4.8	6
85	Accelerating ion transport via in-situ formation of built-in electric field for fast charging sodium-ion batteries. Chemical Engineering Journal, 2022, 450, 138019.	6.6	6
86	2D Electrocatalysts: Recent Progress in 2D Catalysts for Photocatalytic and Electrocatalytic Artificial Nitrogen Reduction to Ammonia (Adv. Energy Mater. 11/2021). Advanced Energy Materials, 2021, 11, 2170043.	10.2	3
87	Preparation of Graphene-Like Carbon Materials as Electrodes of Electric Double Layer Capacitors. Key Engineering Materials, 0, 519, 206-210.	0.4	1
88	Titelbild: Robust SnO2â^'x Nanoparticle-Impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodium-Ion Batteries (Angew. Chem. 29/2018). Angewandte Chemie, 2018, 130, 8919-8919.	1.6	0
89	First-principles study of binary and ternary alloys based on PdCu as oxygen reduction catalysts. Chemical Physics Letters, 2020, 758, 137932.	1.2	0