

# Longcheng Zhang

## List of Articles by Year in descending order

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88

PR articles

7,261

PR citations

38602

48

PR h-index

62058

80

g-index

88

documents

7337

doc citations

45988

49

h-index

5708

citing authors

#	ARTICLE	IF	CITATIONS
1	High-efficiency ammonia electrosynthesis from nitrate on ruthenium-induced trivalent cobalt sites. <i>Energy and Environmental Science</i> , 2025, 18, 5622-5631.	30.8	50
2	Efficient Electrocatalytic Nitrate-to-Ammonia Enabled by Reversible Lattice-Oxygen Control. <i>Journal of the American Chemical Society</i> , 2025, 147, 30401-30411.	15.0	10
3	Amorphous Co@P film on nickel foam: a superior bifunctional electrocatalyst for alkaline seawater splitting. <i>Nanotechnology</i> , 2024, 35, 105702.	2.6	2
4	Boosting electrochemical nitrate-to-ammonia conversion by self-supported MnCo <sub>2</sub> O <sub>4</sub> nanowire array. <i>Journal of Colloid and Interface Science</i> , 2023, 629, 805-812.	9.9	62
5	Unveiling selective nitrate reduction to ammonia with Co <sub>3</sub> O <sub>4</sub> nanosheets/TiO <sub>2</sub> nanobelt heterostructure catalyst. <i>Journal of Colloid and Interface Science</i> , 2023, 630, 714-720.	9.9	107
6	High-efficiency overall alkaline seawater splitting: using a nickel-iron sulfide nanosheet array as a bifunctional electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2023, 11, 1116-1122.	9.3	266
7	Constructing FeS <sub>2</sub> /TiO <sub>2</sub> p-n heterostructure encapsulated in one-dimensional carbon nanofibers for achieving highly stable sodium-ion battery. <i>Chemical Engineering Journal</i> , 2023, 455, 140824.	12.0	60
8	Redox mediators promote electrochemical oxidation of nitric oxide toward ambient nitrate synthesis. <i>Journal of Materials Chemistry A</i> , 2023, 11, 1098-1107.	9.3	19
9	Ambient ammonia synthesis via nitrite electroreduction over NiS <sub>2</sub> nanoparticles-decorated TiO <sub>2</sub> nanoribbon array. <i>Journal of Colloid and Interface Science</i> , 2023, 634, 86-92.	9.9	61
10	Ambient Ammonia Synthesis via Nitrate Electroreduction in Neutral Media on Fe <sub>3</sub> O <sub>4</sub> Nanoparticles-decorated TiO <sub>2</sub> Nanoribbon Array. <i>Inorganic Chemistry</i> , 2023, 62, 25-29.	4.6	54
11	Ni doping enabled improvement in electrocatalytic nitrite-to-ammonia conversion over TiO <sub>2</sub> nanoribbon. <i>Materials Today Energy</i> , 2023, 31, 101220.	5.1	24
12	High-efficiency electrosynthesis of ammonia with selective reduction of nitrite over an Ag nanoparticle-decorated TiO <sub>2</sub> nanoribbon array. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1431-1435.	6.3	58
13	Amorphous Co@P Film: an Efficient Electrocatalyst for Hydrogen Evolution Reaction in Alkaline Seawater. <i>European Journal of Inorganic Chemistry</i> , 2023, 26, .	1.8	9
14	Constructing Co@TiO <sub>2</sub> Nanoarray Heterostructure with Schottky Contact for Selective Electrocatalytic Nitrate Reduction to Ammonia. <i>Small</i> , 2023, 19, .	11.5	140
15	Ni@TiO <sub>2</sub> Nanoarray with the Schottky Junction for the Highly Selective Electrochemical Reduction of Nitrite to Ammonia. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 2686-2691.	6.9	24
16	Fe <sub>3</sub> C nanoparticles decorated 3D nitrogen-doped carbon foam as a highly efficient electrocatalyst for nitrate reduction to ammonia. <i>Journal of Electroanalytical Chemistry</i> , 2023, 933, 117295.	3.8	15
17	Integrating RuO <sub>2</sub> @TiO <sub>2</sub> catalyzed electrochemical chlorine evolution with a NO oxidation reaction for nitrate synthesis. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 2100-2106.	6.3	34
18	Defective TiO <sub>2-x</sub> for High-Performance Electrocatalytic NO Reduction toward Ambient NH <sub>3</sub> Production. <i>Small</i> , 2023, 19, .	11.5	56

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19	Highly efficient and stable oxygen evolution from seawater enabled by a hierarchical NiMoS <sub>x</sub> microcolumn@NiFe-layered double hydroxide nanosheet array. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 2766-2775.	6.3	139
20	Rational Construction of Heterostructured Cu <sub>3</sub> P@TiO <sub>2</sub> Nanoarray for High Efficiency Electrochemical Nitrite Reduction to Ammonia. <i>Small</i> , 2023, 19, .	11.5	59
21	High Efficiency Electroreduction of Nitrite to Ammonia on Ni Nanoparticles Struttred 3D Honeycomb Like Porous Carbon Framework. <i>ChemSusChem</i> , 2023, 16, .	6.2	10
22	Improved Alkaline Seawater Splitting of NiS Nanosheets by Iron Doping. <i>Inorganic Chemistry</i> , 2023, 62, 7976-7981.	4.6	48
23	Advances in ammonia electrosynthesis from ambient nitrate/nitrite reduction. <i>CheM</i> , 2023, 9, 1768-1827.	16.6	407
24	Improved Electrochemical Alkaline Seawater Oxidation over Cobalt Carbonate Hydroxide Nanowire Array by Iron Doping. <i>Inorganic Chemistry</i> , 2023, 62, 11746-11750.	4.6	20
25	Au Nanoparticles Decorated CoP Nanowire Array: A Highly Sensitive, Anticorrosive, and Recyclable Surface-Enhanced Raman Scattering Substrate. <i>Analytical Chemistry</i> , 2023, 95, 11037-11046.	6.5	22
26	A Hierarchical CuO Nanowire@CoFe-Layered Double Hydroxide Nanosheet Array as a High-Efficiency Seawater Oxidation Electrocatalyst. <i>Molecules</i> , 2023, 28, 5718.	4.2	2
27	Hierarchical CoS <sub>2</sub> @NiFe-LDH as an efficient electrocatalyst for alkaline seawater oxidation. <i>Chemical Communications</i> , 2023, 59, 11244-11247.	3.4	17
28	Electrodeposited copper-nickel nanoparticles as highly efficient electrocatalysts for nitrate reduction to ammonia. <i>Sustainable Energy and Fuels</i> , 2023, 7, 4417-4422.	3.9	10
29	Ni <sub>2</sub> P nanosheet array for high-efficiency electrohydrogenation of nitrite to ammonia at ambient conditions. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 1055-1063.	9.9	96
30	Polyrrole-encapsulated Cu <sub>2</sub> Se nanosheets in situ grown on Cu mesh for high stability sodium-ion battery anode. <i>Chemical Engineering Journal</i> , 2022, 433, 134477.	12.0	124
31	Biomass Juncus derived carbon decorated with cobalt nanoparticles enables high-efficiency ammonia electrosynthesis by nitrite reduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2842-2848.	9.3	75
32	High-efficiency ammonia electrosynthesis via selective reduction of nitrate on ZnCo <sub>2</sub> O <sub>4</sub> nanosheet array. <i>Materials Today Physics</i> , 2022, 23, 100619.	6.1	108
33	A gradient hexagonal-prism Fe <sub>3</sub> Se <sub>4</sub> @SiO <sub>2</sub> @C configuration as a highly reversible sodium conversion anode. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4087-4099.	9.3	60
34	Bi nanodendrites for highly efficient electrocatalytic NO reduction to NH <sub>3</sub> at ambient conditions. <i>Materials Today Physics</i> , 2022, 22, 100611.	6.1	54
35	Superior hydrogen evolution electrocatalysis enabled by CoP nanowire array on graphite felt. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 3580-3586.	9.0	125
36	Efficient nitric oxide electroreduction toward ambient ammonia synthesis catalyzed by a CoP nanoarray. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1366-1372.	6.3	96

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37	Ambient Ammonia Synthesis via Electrochemical Reduction of Nitrate Enabled by NiCo <sub>2</sub> O <sub>4</sub> Nanowire Array. <i>Small</i> , 2022, 18, .	11.5	278
38	In situ grown Fe <sub>3</sub> O <sub>4</sub> particle on stainless steel: A highly efficient electrocatalyst for nitrate reduction to ammonia. <i>Nano Research</i> , 2022, 15, 3050-3055.	8.6	162
39	Co@NCNT nanohybrid as a highly active catalyst for the electroreduction of nitrate to ammonia. <i>Chemical Communications</i> , 2022, 58, 3787-3790.	3.4	35
40	A TiO <sub>2</sub> -x nanobelt array with oxygen vacancies: an efficient electrocatalyst toward nitrite conversion to ammonia. <i>Chemical Communications</i> , 2022, 58, 3669-3672.	3.4	69
41	Electrocatalytic two-electron oxygen reduction over nitrogen doped hollow carbon nanospheres. <i>Chemical Communications</i> , 2022, 58, 5025-5028.	3.4	26
42	A FeCo <sub>2</sub> O <sub>4</sub> nanowire array enabled electrochemical nitrate conversion to ammonia. <i>Chemical Communications</i> , 2022, 58, 4480-4483.	3.4	56
43	Coupling denitrification and ammonia synthesis via selective electrochemical reduction of nitric oxide over Fe <sub>2</sub> O <sub>3</sub> nanorods. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6454-6462.	9.3	88
44	Bi nanoparticles/carbon nanosheet composite: A high-efficiency electrocatalyst for NO reduction to NH <sub>3</sub> . <i>Nano Research</i> , 2022, 15, 5032-5037.	8.6	50
45	High-efficiency NO electroreduction to NH <sub>3</sub> over honeycomb carbon nanofiber at ambient conditions. <i>Journal of Colloid and Interface Science</i> , 2022, 616, 261-267.	9.9	36
46	Ni(OH) <sub>2</sub> nanoparticles encapsulated in conductive nanowire array for high-performance alkaline seawater oxidation. <i>Nano Research</i> , 2022, 15, 6084-6090.	8.6	142
47	Nitrite reduction over Ag nanoarray electrocatalyst for ammonia synthesis. <i>Journal of Colloid and Interface Science</i> , 2022, 623, 513-519.	9.9	114
48	Conductive Two-Dimensional Magnesium Metal-Organic Frameworks for High-Efficiency O <sub>2</sub> Electroreduction to H <sub>2</sub> O <sub>2</sub> . <i>ACS Catalysis</i> , 2022, 12, 6092-6099.	12.4	183
49	Enhancing Electrocatalytic NO Reduction to NH <sub>3</sub> by the CoS Nanosheet with Sulfur Vacancies. <i>Inorganic Chemistry</i> , 2022, 61, 8096-8102.	4.6	63
50	Ambient N <sub>2</sub> -to-NH <sub>3</sub> fixation over a CeO <sub>2</sub> nanoparticle decorated three-dimensional carbon skeleton. <i>Sustainable Energy and Fuels</i> , 2022, 6, 3344-3348.	3.9	58
51	High-performance electrochemical nitrate reduction to ammonia under ambient conditions using NiFe <sub>2</sub> O <sub>4</sub> nanosheet arrays. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3392-3397.	6.3	45
52	Enhanced N <sub>2</sub> -to-NH <sub>3</sub> conversion efficiency on Cu <sub>3</sub> P nanoribbon electrocatalyst. <i>Nano Research</i> , 2022, 15, 7134-7138.	8.6	93
53	Enhanced electrocatalytic nitrate reduction to ammonia using plasma-induced oxygen vacancies in CoTiO <sub>3</sub> nanofiber. <i>Carbon Neutralization</i> , 2022, 1, 6-13.	10.5	54
54	High-Efficiency Electrosynthesis of Ammonia with Selective Reduction of Nitrate in Neutral Media Enabled by Self-Supported Mn <sub>2</sub> CoO <sub>4</sub> Nanoarray. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 33242-33247.	8.0	37

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55	N, O-doped carbon foam as metal-free electrocatalyst for efficient hydrogen production from seawater. <i>Nano Research</i> , 2022, 15, 8922-8927.	8.6	117
56	CeO <sub>2</sub> nanoparticles with oxygen vacancies decorated N-doped carbon nanorods: A highly efficient catalyst for nitrate electroreduction to ammonia. <i>Nano Research</i> , 2022, 15, 8914-8921.	8.6	79
57	Benzoate anions-intercalated NiFe-layered double hydroxide nanosheet array with enhanced stability for electrochemical seawater oxidation. <i>Nano Research Energy</i> , 2022, 1, e9120028.	19.6	303
58	Aliovalent doping engineering enables multiple modulations of FeS <sub>2</sub> anodes to achieve fast and durable sodium storage. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21149-21160.	9.3	60
59	Epoxidation of olefins enabled by an electro-organic system. <i>Green Chemistry</i> , 2022, 24, 8264-8269.	9.1	41
60	Ni nanoparticle-decorated biomass carbon for efficient electrocatalytic nitrite reduction to ammonia. <i>Nanoscale</i> , 2022, 14, 13073-13077.	5.0	31
61	Oxygen vacancies in Co <sub>3</sub> O <sub>4</sub> nanoarrays promote nitrate electroreduction for ammonia synthesis. <i>Sustainable Energy and Fuels</i> , 2022, 6, 4130-4136.	3.9	119
62	High-Efficiency Electrochemical Nitrate Reduction to Ammonia on a Co <sub>3</sub> O <sub>4</sub> Nanoarray Catalyst with Cobalt Vacancies. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 46595-46602.	8.0	160
63	Ambient Electroreduction of Nitrite to Ammonia over Ni Nanoparticle Supported on Molasses-Derived Carbon Sheets. <i>ACS Applied Nano Materials</i> , 2022, 5, 14246-14250.	5.3	89
64	RuO <sub>2</sub> nanoparticle-decorated TiO <sub>2</sub> nanobelt array as a highly efficient electrocatalyst for the hydrogen evolution reaction at all pH values. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 6602-6607.	6.3	118
65	Direct eight-electron NO <sub>3</sub> <sup>−</sup> to-NH <sub>3</sub> conversion: using a Co-doped TiO <sub>2</sub> nanoribbon array as a high-efficiency electrocatalyst. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 6412-6417.	6.3	25
66	Co/N-doped carbon nanospheres derived from an adenine-based metal organic framework enabled high-efficiency electrocatalytic nitrate reduction to ammonia. <i>Chemical Communications</i> , 2022, 58, 13459-13462.	3.4	36
67	Amorphous Co-Mo-B Film: A High-Active Electrocatalyst for Hydrogen Generation in Alkaline Seawater. <i>Molecules</i> , 2022, 27, 7617.	4.2	94
68	Recent Advances in 1D Electrospun Nanocatalysts for Electrochemical Water Splitting. <i>Small Structures</i> , 2021, 2, .	11.0	215
69	Yolk-shell porous carbon spheres@CoSe <sub>2</sub> nanosheets as multilayer defenses system of polysulfide for advanced Li-S batteries. <i>Chemical Engineering Journal</i> , 2021, 413, 127521.	12.0	65
70	CoTe nanoparticle-embedded N-doped hollow carbon polyhedron: an efficient catalyst for H <sub>2</sub> O <sub>2</sub> electrosynthesis in acidic media. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21703-21707.	9.3	51
71	In Situ Derived Bi Nanoparticles Confined in Carbon Rods as an Efficient Electrocatalyst for Ambient N <sub>2</sub> Reduction to NH <sub>3</sub> . <i>Inorganic Chemistry</i> , 2021, 60, 7584-7589.	4.6	27
72	N-doped carbon nanotubes supported CoSe <sub>2</sub> nanoparticles: A highly efficient and stable catalyst for H <sub>2</sub> O <sub>2</sub> electrosynthesis in acidic media. <i>Nano Research</i> , 2021, 15, 304-309.	8.6	136

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73	High-Performance Electrochemical NO Reduction into NH <sub>3</sub> by MoS <sub>2</sub> Nanosheet. <i>Angewandte Chemie</i> , 2021, 133, 25467-25472.	1.4	149
74	High-Performance Electrochemical NO Reduction into NH <sub>3</sub> by MoS <sub>2</sub> Nanosheet. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25263-25268.	14.4	301
75	Recent Progress in Electrocatalytic Methanation of CO <sub>2</sub> at Ambient Conditions. <i>Advanced Functional Materials</i> , 2021, 31, .	17.0	143
76	A NiCo LDH nanosheet array on graphite felt: an efficient 3D electrocatalyst for the oxygen evolution reaction in alkaline media. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3162-3166.	6.3	211
77	A hierarchical CuO@NiCo layered double hydroxide core-shell nanoarray as an efficient electrocatalyst for the oxygen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3049-3054.	6.3	303
78	High-efficiency electrohydrogenation of nitric oxide to ammonia on a Ni <sub>2</sub> P nanoarray under ambient conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 24268-24275.	9.3	106
79	Functional integration of hierarchical core-shell architectures via vertically arrayed ultrathin CuSe nanosheets decorated on hollow CuS microcages targeting highly effective sodium-ion storage. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27615-27628.	9.3	91
80	High-performance NH <sub>3</sub> production via NO electroreduction over a NiO nanosheet array. <i>Chemical Communications</i> , 2021, 57, 13562-13565.	3.4	81
81	MXene-derived three-dimensional carbon nanotube network encapsulate CoS <sub>2</sub> nanoparticles as an anode material for solid-state sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3018-3026.	9.3	77
82	Flexible electrode constructed by encapsulating ultrafine VSe <sub>2</sub> in carbon fiber for quasi-solid-state sodium ion batteries. <i>Journal of Power Sources</i> , 2020, 470, 228438.	7.9	38
83	A rough endoplasmic reticulum-like VSe <sub>2</sub> /rGO anode for superior sodium-ion capacitors. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2935-2943.	6.3	58
84	Novel CdFe Bimetallic Complex-Derived Ultrasmall Fe- and N-Codoped Carbon as a Highly Efficient Oxygen Reduction Catalyst. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 21481-21488.	8.0	25
85	A coaxial nanocable textured by a cerium oxide shell and carbon core for sensing nitric oxide. <i>Mikrochimica Acta</i> , 2019, 186, .	4.7	3
86	Green Urea Synthesis from CO <sub>2</sub> and Nitrogenous Small Molecules via Electrocatalysis and Photocatalysis. <i>Small Science</i> , 0, 5, .	7.7	7
87	Seeding a Gradient Solid-Electrolyte Interphase in Anode-Free Lithium Metal Batteries. <i>Nano Letters</i> , 0, 26, 1211-1219.	8.7	0
88	Aryl sulfur ligand-modulated silver catalysts with tailored binding affinity for selective nitrate-to-ammonia conversion. <i>Nature Communications</i> , 0, 17, .	13.7	0