Jianwei Nai

List of Publications by Year
in descending order

62 papers	7,549 citations	70961 41 h-index	118652 62 g-index
63 all docs	63 docs citations	63 times ranked	8559 citing authors

#	ARTICLE	IF	CITATIONS
1	Construction of Ni(CN)₂/NiSe₂ Heterostructures by Stepwise Topochemical Pathways for Efficient Electrocatalytic Oxygen Evolution. Advanced Materials, 2022, 34, e2104405.	11.1	73
2	Soybean Protein Fiber Enabled Controllable Li Deposition and a LiF-Nanocrystal-Enriched Interface for Stable Li Metal Batteries. Nano Letters, 2022, 22, 1374-1381.	4.5	41
3	A review of concepts and contributions in lithium metal anode development. Materials Today, 2022, 53, 173-196.	8.3	74
4	Interfacial and Ionic Modulation of Poly (Ethylene Oxide) Electrolyte Via Localized Iodization to Enable Dendriteâ€Free Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, .	7.8	77
5	Synthesis of NiSe₂/Fe₃O₄ Nanotubes with Heteroepitaxy Configuration as a Highâ€Efficient Oxygen Evolution Electrocatalyst. Small Methods, 2022, 6, e2200377.	4.6	22
6	In-Situ Electrodeposition of Nanostructured Carbon Strengthened Interface for Stabilizing Lithium Metal Anode. ACS Nano, 2022, 16, 9883-9893.	7.3	34
7	Armed lithium metal anodes with functional skeletons. Materials Today Nano, 2021, 13, 100103.	2.3	38
8	In-situ construction of a Mg-modified interface to guide uniform lithium deposition for stable all-solid-state batteries. Journal of Energy Chemistry, 2021, 55, 272-278.	7.1	49
9	A fast-ion conducting interface enabled by aluminum silicate fibers for stable Li metal batteries. Chemical Engineering Journal, 2021, 408, 128016.	6.6	48
10	Recent development of Na metal anodes: Interphase engineering chemistries determine the electrochemical performance. Chemical Engineering Journal, 2021, 409, 127943.	6.6	38
11	Lithiated aromatic biopolymer as high-performance organic anodes for lithium-ion storage. Chemical Engineering Journal, 2021, 409, 127454.	6.6	13
12	Lithium ion diffusion mechanism on the inorganic components of the solidâ€“electrolyte interphase. Journal of Materials Chemistry A, 2021, 9, 10251-10259.	5.2	66
13	Rejuvenating dead lithium supply in lithium metal anodes by iodine redox. Nature Energy, 2021, 6, 378-387.	19.8	282
14	Amorphous carbon-based materials as platform for advanced high-performance anodes in lithium secondary batteries. Nano Research, 2021, 14, 2053-2066.	5.8	26
15	A Decade of Progress on Solidâ€State Electrolytes for Secondary Batteries: Advances and Contributions. Advanced Functional Materials, 2021, 31, 2100891.	7.8	73
16	Visualizing the Sensitive Lithium with Atomic Precision: Cryogenic Electron Microscopy for Batteries. Accounts of Chemical Research, 2021, 54, 2088-2099.	7.6	59
17	Silicious nanowires enabled dendrites suppression and flame retardancy for advanced lithium metal anodes. Nano Energy, 2021, 82, 105723.	8.2	50
18	Marrying Ester Group with Lithium Salt: Celluloseâ€Acetateâ€Enabled LiFâ€Enriched Interface for Stable Lithium Metal Anodes. Advanced Functional Materials, 2021, 31, 2102228.	7.8	57

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19	Cryoâ€Electron Microscopy for Unveiling the Sensitive Battery Materials. Small Science, 2021, 1, 2100055.	5.8	35
20	Undervalued Roles of Binder in Modulating Solid Electrolyte Interphase Formation of Silicon-Based Anode Materials. ACS Applied Materials & Interfaces, 2021, 13, 45139-45148.	4.0	36
21	Strategies to improve the performance of phosphide anodes in sodium-ion batteries. Nano Energy, 2021, 90, 106475.	8.2	45
22	Biomass-based materials for green lithium secondary batteries. Energy and Environmental Science, 2021, 14, 1326-1379.	15.6	157
23	Enhanced stability of silver nanowire transparent conductive films against ultraviolet light illumination. Nanotechnology, 2021, 32, 055603.	1.3	5
24	Arrayed silk fibroin for high-performance Li metal batteries and atomic interface structure revealed by cryo-TEM. Journal of Materials Chemistry A, 2020, 8, 26045-26054.	5.2	47
25	Doubleâ€Shelled C@MoS 2 Structures Preloaded with Sulfur: Anâ€‰Additive Reservoir for Stable Lithium Metal Anodes. Angewandte Chemie, 2020, 132, 15973-15977.	1.6	11
26	Doubleâ€Shelled C@MoS₂ Structures Preloaded with Sulfur: Anâ€‰Additive Reservoir for Stable Lithium Metal Anodes. Angewandte Chemie - International Edition, 2020, 59, 15839-15843.	7.2	79
27	12 years roadmap of the sulfur cathode for lithium sulfur batteries (2009â€“2020). Energy Storage Materials, 2020, 30, 346-366.	9.5	189
28	An ultrastable lithium metal anode enabled by designed metal fluoride spansules. Science Advances, 2020, 6, eaaz3112.	4.7	157
29	Platinum nano-interlayer enhanced interface for stable all-solid-state batteries observed <i>via</i> cryo-transmission electron microscopy. Journal of Materials Chemistry A, 2020, 8, 13541-13547.	5.2	47
30	In Situ Construction of a LiFâ€Enriched Interface for Stable Allâ€Solidâ€State Batteries and its Origin Revealed by Cryoâ€TEM. Advanced Materials, 2020, 32, e2000223.	11.1	278
31	Biomacromolecules enabled dendrite-free lithium metal battery and its origin revealed by cryo-electron microscopy. Nature Communications, 2020, 11, 488.	5.8	158
32	Construction of Hierarchical Coâ€“Fe Oxyphosphide Microtubes for Electrocatalytic Overall Water Splitting. Advanced Science, 2019, 6, 1900576.	5.6	208
33	A review of biomass materials for advanced lithiumâ€“sulfur batteries. Chemical Science, 2019, 10, 7484-7495.	3.7	180
34	Atomic Sulfur Covalently Engineered Interlayers of Ti₃C₂ MXene for Ultraâ€Fast Sodiumâ€Ion Storage by Enhanced Pseudocapacitance. Advanced Functional Materials, 2019, 29, 1808107.	7.8	213
35	Synthesis of Diverse Green Carbon Nanomaterials through Fully Utilizing Biomass Carbon Source Assisted by KOH. ACS Applied Materials & Interfaces, 2019, 11, 24205-24211.	4.0	42
36	Sulfurâ€“nitrogen co-doped porous carbon nanosheets to control lithium growth for a stable lithium metal anode. Journal of Materials Chemistry A, 2019, 7, 18267-18274.	5.2	71

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37	Empowering Metal Phosphides Anode with Catalytic Attribute toward Superior Cyclability for Lithiumâ€ion Storage. Advanced Functional Materials, 2019, 29, 1809051.	7.8	52
38	Ordered colloidal clusters constructed by nanocrystals with valence for efficient CO ₂ photoreduction. Science Advances, 2019, 5, eaax5095.	4.7	62
39	Hollow Structures Based on Prussian Blue and Its Analogs for Electrochemical Energy Storage and Conversion. Advanced Materials, 2019, 31, e1706825.	11.1	445
40	Formation of NiCo₂V₂O₈ Yolkâ€"Double Shell Spheres with Enhanced Lithium Storage Properties. Angewandte Chemie, 2018, 130, 2949-2953.	1.6	17
41	Ultrathin amorphous cobaltâ€"vanadium hydr(oxy)oxide catalysts for the oxygen evolution reaction. Energy and Environmental Science, 2018, 11, 1736-1741.	15.6	310
42	Formation of NiCo₂V₂O₈ Yolkâ€"Double Shell Spheres with Enhanced Lithium Storage Properties. Angewandte Chemie - International Edition, 2018, 57, 2899-2903.	7.2	131
43	The Flexibility of an Amorphous Cobalt Hydroxide Nanomaterial Promotes the Electrocatalysis of Oxygen Evolution Reaction. Small, 2018, 14, e1703514.	5.2	121
44	Construction of hierarchical Niâ€"Coâ€"P hollow nanobricks with oriented nanosheets for efficient overall water splitting. Energy and Environmental Science, 2018, 11, 872-880.	15.6	773
45	Construction of Single-Crystalline Prussian Blue Analog Hollow Nanostructures with Tailorable Topologies. CheM, 2018, 4, 1967-1982.	5.8	145
46	Formation of Tiâ€"Fe mixed sulfide nanoboxes for enhanced electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2018, 6, 21891-21895.	5.2	27
47	Oriented assembly of anisotropic nanoparticles into frame-like superstructures. Science Advances, 2017, 3, e1700732.	4.7	158
48	Formation of Niâ€"Fe Mixed Diselenide Nanocages as a Superior Oxygen Evolution Electrocatalyst. Advanced Materials, 2017, 29, 1703870.	11.1	428
49	Metal-Organic-Framework-Based Materials as Platforms for Renewable Energy and Environmental Applications. Joule, 2017, 1, 77-107.	11.7	673
50	Electrochemistry: Efficient Electrocatalytic Water Oxidation by Using Amorphous Ni-Co Double Hydroxides Nanocages (Adv. Energy Mater. 10/2015). Advanced Energy Materials, 2015, 5, .	10.2	4
51	Efficient Electrocatalytic Water Oxidation by Using Amorphous Niâ€"Co Double Hydroxides Nanocages. Advanced Energy Materials, 2015, 5, 1401880.	10.2	307
52	Tailoring the shape of amorphous nanomaterials: recent developments and applications. Science China Materials, 2015, 58, 44-59.	3.5	51
53	Synthesis of Amorphous Niâˆ'Zn Double Hydroxide Nanocages with Excellent Electrocatalytic Activity toward Oxygen Evolution Reaction. ChemNanoMat, 2015, 1, 324-330.	1.5	32
54	Facile and Universal Superhydrophobic Modification to Fabricate Waterborne, Multifunctional Nacre-Mimetic Films with Excellent Stability. ACS Applied Materials & Interfaces, 2014, 6, 20597-20602.	4.0	13

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55	Nickel hydroxide nanocrystals-modified glassy carbon electrodes for sensitive l-histidine detection. Electrochimica Acta, 2014, 116, 258-262.	2.6	30
56	CoO Hollow Cube/Reduced Graphene Oxide Composites with Enhanced Lithium Storage Capability. Chemistry of Materials, 2014, 26, 5958-5964.	3.2	135
57	Nanostructures: Amorphous Ni(OH)₂ Nanoboxes: Fast Fabrication and Enhanced Sensing for Glucose (Small 18/2013). Small, 2013, 9, 3184-3184.	5.2	2
58	Structureâ€Dependent Electrocatalysis of Ni(OH)₂ Hourglassâ€like Nanostructures Towards <scp>L</scp>â€Histidine. Chemistry - A European Journal, 2013, 19, 501-508.	1.7	21
59	Amorphous Ni(OH)₂ Nanoboxes: Fast Fabrication and Enhanced Sensing for Glucose. Small, 2013, 9, 3147-3152.	5.2	145
60	Pearsonâ€™s Principle Inspired Generalized Strategy for the Fabrication of Metal Hydroxide and Oxide Nanocages. Journal of the American Chemical Society, 2013, 135, 16082-16091.	6.6	284
61	Coordination Polyhedra: A Probable Basic Growth Unit in Solution for the Crystal Growth of Inorganic Nonmetallic Nanomaterials?. Crystal Growth and Design, 2012, 12, 2653-2661.	1.4	14
62	Selective Synthesis of Peapodlike Ni/Ni₃S₂ Nanochains and Nickel Sulfide Hollow Chains and Their Magnetic Properties. Advanced Functional Materials, 2010, 20, 3678-3683.	7.8	91