Gen-Ban Sun

List of Publications by Year
in descending order

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Version: 2024-02-01

84 papers	5,470 citations	109321 35 h-index	82547 72 g-index
86 all docs	86 docs citations	86 times ranked	5971 citing authors

#	Article	IF	Citations
1	Hierarchical Dendrite-Like Magnetic Materials of Fe₃O₄, Î³-Fe₂O₃, and Fe with High Performance of Microwave Absorption. Chemistry of Materials, 2011, 23, 1587-1593.	6.7	884
2	Hierarchical Nanoassembly of MoS₂/Co₉S₈/Ni₃S₂/Ni as a Highly Efficient Electrocatalyst for Overall Water Splitting in a Wide pH Range. Journal of the American Chemical Society, 2019, 141, 10417-10430.	13.7	653
3	Efficient Uranium Capture by Polysulfide/Layered Double Hydroxide Composites. Journal of the American Chemical Society, 2015, 137, 3670-3677.	13.7	404
4	Hexagonal and cubic Ni nanocrystals grown on graphene: phase-controlled synthesis, characterization and their enhanced microwave absorption properties. Journal of Materials Chemistry, 2012, 22, 15190.	6.7	249
5	Enhancing the Electromagnetic Performance of Co through the Phase-Controlled Synthesis of Hexagonal and Cubic Co Nanocrystals Grown on Graphene. ACS Applied Materials & Interfaces, 2013, 5, 12716-12724.	8.0	190
6	Rapid Simultaneous Removal of Toxic Anions [HSeO₃]^{â¯}, [SeO₃]^{2â€“}, and [SeO₄]^{2â€“}, and Metals Hg²⁺, Cu²⁺, and Cd²⁺ by MoS₄^{2â€“} Intercalated Layered Double Hydroxide. Journal of the American Chemical Society, 2017, 139, 12745-12757.	13.7	164
7	Selective and Efficient Removal of Toxic Oxoanions of As(III), As(V), and Cr(VI) by Layered Double Hydroxide Intercalated with MoS₄^{2â€“}. Chemistry of Materials, 2017, 29, 3274-3284.	6.7	137
8	Highly Efficient Iodine Capture by Layered Double Hydroxides Intercalated with Polysulfides. Chemistry of Materials, 2014, 26, 7114-7123.	6.7	132
9	In Situ Preparation of Cobalt Nanoparticles Decorated in N-Doped Carbon Nanofibers as Excellent Electromagnetic Wave Absorbers. ACS Applied Materials & Interfaces, 2018, 10, 22591-22601.	8.0	124
10	Enhanced microwave absorption performance of highly dispersed CoNi nanostructures arrayed on graphene. Nano Research, 2018, 11, 2689-2704.	10.4	123
11	Regulating the Spin State of Fe^{III} Enhances the Magnetic Effect of the Molecular Catalysis Mechanism. Journal of the American Chemical Society, 2022, 144, 8204-8213.	13.7	111
12	Ultrathin Two-Dimensional Metalâ€“Organic Framework Nanosheets with the Inherent Open Active Sites as Electrocatalysts in Aprotic Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2019, 11, 11403-11413.	8.0	108
13	Remarkable Acid Stability of Polypyrroleâ€MoS₄: A Highly Selective and Efficient Scavenger of Heavy Metals Over a Wide pH Range. Advanced Functional Materials, 2018, 28, 1800502.	14.9	88
14	Hierarchical Three-Dimensional Cobalt Phosphate Microarchitectures: Large-Scale Solvothermal Synthesis, Characterization, and Magnetic and Microwave Absorption Properties. Journal of Physical Chemistry C, 2008, 112, 15948-15955.	3.1	77
15	In Situ Construction of a Mn²⁺-Doped Ni₃S₂ Electrode with Highly Enhanced Urea Oxidation Reaction Performance. ACS Sustainable Chemistry and Engineering, 2020, 8, 8348-8355.	6.7	72
16	Morphology-Controlled Synthesis of Ni-MOFs with Highly Enhanced Electrocatalytic Performance for Urea Oxidation. Inorganic Chemistry, 2019, 58, 11449-11457.	4.0	69
17	Facile Synthesis, Characterization, and Microwave Absorbability of CoO Nanobelts and Submicrometer Spheres. Journal of Physical Chemistry C, 2009, 113, 6948-6954.	3.1	67
18	Nanocage Structure Derived from Sulfonated Î²-Cyclodextrin Intercalated Layered Double Hydroxides and Selective Adsorption for Phenol Compounds. Inorganic Chemistry, 2014, 53, 1521-1529.	4.0	66

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19	Selective Lithiationâ€“Expansionâ€“Microexplosion Synthesis of Two-Dimensional Fluoride-Free Mxene. , 2019, 1, 628-632.		64
20	(NiFe)S2 nanoparticles grown on graphene as an efficient electrocatalyst for oxygen evolution reaction. Electrochimica Acta, 2018, 286, 195-204.	5.2	59
21	From Layered Double Hydroxide to Spinel Nanostructures:â€‰ Facile Synthesis and Characterization of Nanoplatelets and Nanorods. Journal of Physical Chemistry B, 2006, 110, 13375-13380.	2.6	58
22	Li+-clipping for edge S-vacancy MoS2 quantum dots as an efficient bifunctional electrocatalyst enabling discharge growth of amorphous Li2O2 film. Nano Energy, 2019, 65, 103996.	16.0	56
23	Polypyrroleâ€“Mo₃S₁₃: An Efficient Sorbent for the Capture of Hg²⁺ and Highly Selective Extraction of Ag⁺ over Cu²⁺. Journal of the American Chemical Society, 2020, 142, 1574-1583.	13.7	55
24	â€œLewis Base-Hungryâ€•Amorphousâ€“Crystalline Nickel Borateâ€“Nickel Sulfide Heterostructures by In Situ Structural Engineering as Effective Bifunctional Electrocatalysts toward Overall Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 23896-23903.	8.0	53
25	Intercalation of Azamacrocyclic Crown Ether into Layered Rare-Earth Hydroxide (LRH): Secondary Hostâ€“Guest Reaction and Efficient Heavy Metal Removal. Inorganic Chemistry, 2013, 52, 14010-14017.	4.0	46
26	Significant enhancement of the performance of hydrogen evolution reaction through shape-controlled synthesis of hierarchical dendrite-like platinum. Journal of Materials Chemistry A, 2018, 6, 8068-8077.	10.3	46
27	3D Porous Amorphous Î³-CrOOH on Ni Foam as Bifunctional Electrocatalyst for Overall Water Splitting. Inorganic Chemistry, 2019, 58, 4014-4018.	4.0	44
28	Oxygen Vacancy-Rich RuO₂â€“Co₃O₄ Nanohybrids as Improved Electrocatalysts for Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2021, 13, 39239-39247.	8.0	44
29	Rational design of 3D hierarchical MXene@AlF3/Ni(OH)2 nanohybrid for high-performance lithium-sulfur batteries. Chemical Engineering Journal, 2021, 409, 128102.	12.7	43
30	In situ synthesis of CoFe2O4 nanocrystals decorated in mesoporous carbon nanofibers with enhanced electromagnetic performance. Journal of Alloys and Compounds, 2020, 826, 154147.	5.5	41
31	Amorphous Boron Oxide Coated NiCo Layered Double Hydroxide Nanoarrays for Highly Efficient Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2018, 6, 14257-14263.	6.7	40
32	FeNi3 alloy nanocrystals grown on graphene: Controllable synthesis, in-depth characterization and enhanced electromagnetic performance. Journal of Alloys and Compounds, 2016, 678, 468-477.	5.5	39
33	Controllable synthesis of ultrathin Co9S8 nanosheets as a highly efficient electrocatalyst for overall water splitting. Electrochimica Acta, 2018, 281, 198-207.	5.2	39
34	Engineering borate modified NiFe layer double hydroxide nanoarrays as â€œhydroxyl ions hungryâ€• electrocatalysts for enhanced oxygen evolution. Chemical Communications, 2019, 55, 1334-1337.	4.1	39
35	Porous Co3O4 nanorods anchored on graphene nanosheets as an effective electrocatalysts for aprotic Li-O2 batteries. Applied Surface Science, 2018, 444, 312-319.	6.1	36
36	Theoretical Design and Structural Modulation of a Surface-Functionalized Ti₃C₂T_x MXene-Based Heterojunction Electrocatalyst for a Liâ€“Oxygen Battery. ACS Nano, 2022, 16, 4487-4499.	14.6	36

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37	Solid and macroporous Fe3C/N-C nanofibers with enhanced electromagnetic wave absorbability. Scientific Reports, 2018, 8, 16832.	3.3	35
38	Needle grass-like cobalt hydrogen phosphate on Ni foam as an effective and stable electrocatalyst for the oxygen evolution reaction. Chemical Communications, 2019, 55, 9729-9732.	4.1	33
39	In situ decoration of nanosized metal oxide on highly conductive MXene nanosheets as efficient catalyst for Li-O2 battery. Journal of Energy Chemistry, 2020, 47, 272-280.	12.9	31
40	Nickel oxide nanoparticles decorated highly conductive Ti3C2 MXene as cathode catalyst for rechargeable Liâ€“O2 battery. Journal of Alloys and Compounds, 2020, 824, 153803.	5.5	30
41	Structural adjustment during intercalation of macrocyclic crown ether into LDH via swelling/restoration reaction: staging formation and mechanism insights. Dalton Transactions, 2011, 40, 9835.	3.3	29
42	Uniform Fe_xNi_y Nanospheres: Cost-Effective Electrocatalysts for Nonaqueous Rechargeable Liâ€“O₂ Batteries. ACS Omega, 2017, 2, 4269-4277.	3.5	29
43	Hybrid of Europiumâ€Doped Layered Yttrium Hydroxide and Organic Sensitizer â€“ Effect of Solvent on Structure and Luminescence Behavior. European Journal of Inorganic Chemistry, 2013, 2013, 32-38.	2.0	28
44	Mottâ€“Schottky heterostructure induce the interfacial electron redistribution of MoS2 for boosting pH-universal hydrogen evolution with Pt-like activity. Nano Energy, 2022, 101, 107563.	16.0	28
45	Synthesis, characterization and electromagnetic performance of nanocomposites of graphene with Î±-LiFeO₂and Î²-LiFe₅O₈. Journal of Materials Chemistry C, 2015, 3, 5457-5466.	5.5	27
46	Perovskite La_{0.5}Sr_{0.5}CoO_{3â^'Î´} Grown on Ti₃C₂T_x MXene Nanosheets as Bifunctional Efficient Hybrid Catalysts for Liâ€“Oxygen Batteries. ACS Applied Energy Materials, 2019, 2, 4144-4150.	5.1	26
47	Ordered two-dimensional porous Co3O4 nanosheets as electrocatalysts for rechargeable Li-O2 batteries. Nano Research, 2019, 12, 299-302.	10.4	26
48	Intercalation of Diverse Organic Guests into Layered Europium Hydroxides â€“ Structural Tuning and Photoluminescence Behavior. European Journal of Inorganic Chemistry, 2014, 2014, 559-566.	2.0	25
49	Manganese Carbodiimide Nanoparticles Modified with N-Doping Carbon: A Bifunctional Cathode Electrocatalyst for Aprotic Liâ€“O₂ Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 17464-17473.	6.7	25
50	Nanostructured Ni/Ti3C2T MXene hybrid as cathode for lithium-oxygen battery. Chinese Chemical Letters, 2020, 31, 1000-1003.	9.0	25
51	Engineering Lithium Ions Embedded in NiFe Layered Double Hydroxide Lattices To Activate Laminated Ni²⁺ Sites as Highâ€Efficiency Oxygen Evolution Reaction Catalysts. Chemistry - A European Journal, 2020, 26, 7244-7249.	3.3	25
52	Î±-MoC_{1â€“x} Quantum Dots Encapsulated in Nitrogen-Doped Carbon for Hydrogen Evolution Reaction at All pH Values. ACS Sustainable Chemistry and Engineering, 2019, 7, 9637-9645.	6.7	24
53	3D Cross-Linked Structure of Manganese Nickel Phosphide Ultrathin Nanosheets: Electronic Structure Optimization for Efficient Bifunctional Electrocatalysts. ACS Applied Energy Materials, 2021, 4, 8563-8571.	5.1	24
54	In-situ growth of ultrathin cobalt monoxide nanocrystals on reduced graphene oxide substrates: an efficient electrocatalyst for aprotic Liâ€“O₂ batteries. Nanotechnology, 2017, 28, 185401.	2.6	23

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55	The design of hollow PdOâ€“Co₃O₄ nano-dodecahedrons with moderate catalytic activity for Liâ€“O₂ batteries. Chemical Communications, 2019, 55, 12683-12686.	4.1	23
56	Delaminated layered rare-earth hydroxide composites with ortho-coumaric acid: color-tunable luminescence and blue emission due to energy transfer. Journal of Materials Chemistry C, 2015, 3, 7143-7152.	5.5	22
57	Intercalation of coumaric acids into layered rare-earth hydroxides: controllable structure and photoluminescence properties. Journal of Materials Chemistry C, 2015, 3, 4742-4750.	5.5	21
58	The in situ growth of ultrathin Fcc-NiPt nanocrystals on graphene for methanol and formic acid oxidation. Dalton Transactions, 2018, 47, 15131-15140.	3.3	21
59	Three-dimensional reticular material NiO/Ni-graphene foam as cathode catalyst for high capacity lithium-oxygen battery. Journal of Electroanalytical Chemistry, 2018, 823, 73-79.	3.8	20
60	Hierarchical nMOF-867/MXene Nanocomposite for Chemical Adsorption of Polysulfides in Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 8231-8241.	5.1	20
61	An in situ constructed topological rich vacancy-defect nitrogen-doped nanocarbon as a highly-effective metal-free oxygen catalyst for Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2019, 7, 21918-21926.	10.3	18
62	Ultrathin hexagonal boron nitride as a van der Waalsâ€™ force initiator activated graphene for engineering efficient non-metal electrocatalysts of Li-CO2 battery. Nano Research, 2022, 15, 1171-1177.	10.4	18
63	Selfâ€Catalyzed Rechargeable Lithiumâ€Air Battery by inâ€‰situ Metal Ion Doping of Discharge Products: A Combined Theoretical and Experimental Study. Energy and Environmental Materials, 2023, 6, .	12.8	16
64	Tuning Surface Lattice Strain toward a Ptâ€“Skin CoPt_x Truncated Octahedron for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2019, 123, 29722-29728.	3.1	15
65	Ultralong cycle life enabled by in situ growth of CoMo1â^'P/Mo heterostructure for lithium-sulfur batteries. Journal of Energy Chemistry, 2022, 73, 5-12.	12.9	15
66	A unique delaminated MoS₄/OS-LEuH composite exhibiting turn-on luminescence sensing for detection of water in formamide. Dalton Transactions, 2017, 46, 3110-3114.	3.3	14
67	Two-dimensional Î²-cobalt hydroxide phase transition exfoliated to atom layers as efficient catalyst for lithium-oxygen batteries. Electrochimica Acta, 2018, 281, 420-428.	5.2	14
68	Tuning the oxygen vacancy of mixed multiple oxidation states nanowires for improving Li-air battery performance. Journal of Colloid and Interface Science, 2022, 608, 1384-1392.	9.4	14
69	Crystal Phase Conversion on Cobalt Oxide: Stable Adsorption toward LiO₂ for Filmâ€Like Discharge Products Generation in Liâ€O₂ Battery. Small, 2022, 18, .	10.0	14
70	Mixed spinel and perovskite phased LaSrNiO nanoparticles as cathode catalyst for non-aqueous lithium-oxygen batteries. Electrochimica Acta, 2019, 317, 367-374.	5.2	12
71	Atomically dispersed metal sites anchored in N-doped carbon nanosheets with enhanced Li storage performance. Materials Chemistry Frontiers, 2020, 4, 2157-2167.	5.9	12
72	Highly Active Atomically Dispersed Coâ€“N_x Sites Anchored on Ultrathin N-Doped Carbon Nanosheets with Durability Oxygen Reduction Reaction of Zincâ€“Air Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 16956-16964.	6.7	11

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73	Coâ€Assembly of LDH Nanosheets with Crown Ethers: Structural Transformation and Waterâ€Adsorption Behavior. European Journal of Inorganic Chemistry, 2013, 2013, 1363-1370.	2.0	10
74	Tunable and purified luminescence via energy transfer and delamination of LRH (R = Tb, Y) composites with 8-hydroxypyrene-1,3,6-trisulphonate. Journal of Colloid and Interface Science, 2017, 496, 353-363.	9.4	10
75	Ultrathin Two-Dimensional Bimetalâ€“Organic Framework Nanosheets as High-Performance Electrocatalysts for Benzyl Alcohol Oxidation. Inorganic Chemistry, 2022, 61, 7308-7317.	4.0	10
76	Hierarchical Li1.2Mn0.54Ni0.13Co0.13O2 hollow spherical as cathode material for Li-ion battery. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	9
77	High-purity production of ultrathin boron nitride nanosheets via shock chilling and their enhanced mechanical performance and transparency in nanocomposite hydrogels. Nanotechnology, 2018, 29, 215602.	2.6	8
78	Assembly of CoNi nanoparticles on Ketjenblack carbon with superior performance and optimized impedance matching for electromagnetic wave absorption. Journal of Alloys and Compounds, 2019, 798, 790-799.	5.5	8
79	In situ decoration of CoP/Ti3C2T composite as efficient electrocatalyst for Li-oxygen battery. Chinese Chemical Letters, 2023, 34, 107152.	9.0	5
80	Vacancy-defects turn off conjugated Ï€ bond shield activated catalytic molecular adsorption process. Applied Surface Science, 2021, 543, 148790.	6.1	4
81	Solvothermal synthesis of monodispersed CoZr4(PO4)6 microspheres and their application as microwave absorber. Materials Research Bulletin, 2012, 47, 602-607.	5.2	3
82	Enhanced Electromagnetic Performance of MnFe₂O₄ Nanocrystals Grown on Graphene via a One-Step Solution Route. Science of Advanced Materials, 2019, 11, 283-290.	0.7	3
83	ç”¨äºŽé«˜æ•ˆç”µå‚¬åŒ–æžæ°§åå”çš„é”°æŽºæ‚é•é“åŒé‡‘å±žæ°¢æ°§åŒ–ç‰©å‚¬åŒ–å‰‚. Chinese Science Bulletin, 2022, , .	0.7	3
84	å…·æœ‰é«˜ä»·æ°§åŒ–æ€çš„è¶…è–„äºŒç»´Ni-MOFé«˜æ€§èƒ½ç”µå‚¬åŒ–å‰‚ç”¨äºŽè‹¯ç”²é†‡æ°§åŒ–åå”. Scientia Sinica Chimica,	0.4	0