Ning Chen

List of Publications by Year
in descending order

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118 papers	9,123 citations	70961 41 h-index	42291 92 g-index
119 all docs	119 docs citations	119 times ranked	11953 citing authors

#	Article	IF	Citations
1	Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337.	6.0	1,948
2	Single-Atom Au/NiFe Layered Double Hydroxide Electrocatalyst: Probing the Origin of Activity for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2018, 140, 3876-3879.	6.6	817
3	Single-atom Catalysis Using Pt/Graphene Achieved through Atomic Layer Deposition. Scientific Reports, 2013, 3, .	1.6	719
4	Graphene Defects Trap Atomic Ni Species for Hydrogen and Oxygen Evolution Reactions. CheM, 2018, 4, 285-297.	5.8	624
5	Atomic layer deposited Pt-Ru dual-metal dimers and identifying their active sites for hydrogen evolution reaction. Nature Communications, 2019, 10, 4936.	5.8	371
6	A Promoted Charge Separation/Transfer System from Cu Single Atoms and C₃N₄ Layers for Efficient Photocatalysis. Advanced Materials, 2020, 32, e2003082.	11.1	333
7	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie - International Edition, 2019, 58, 16427-16432.	7.2	232
8	Removal of hexavalent chromium in aqueous solutions using biochar: Chemical and spectroscopic investigations. Science of the Total Environment, 2018, 625, 1567-1573.	3.9	190
9	Ultra-long life rechargeable zinc-air battery based on high-performance trimetallic nitride and NCNT hybrid bifunctional electrocatalysts. Nano Energy, 2019, 61, 86-95.	8.2	134
10	Li₁₀Ge(P_{1â€“x}Sb_x)₂S₁₂ Lithium-Ion Conductors with Enhanced Atmospheric Stability. Chemistry of Materials, 2020, 32, 2664-2672.	3.2	125
11	Structural Evolution and Redox Processes Involved in the Electrochemical Cycling of P2â€“Na_{0.67}[Mn_{0.66}Fe_{0.20}Cu_{0.14}]O₂. Chemistry of Materials, 2017, 29, 6684-6697.	3.2	112
12	Catalytic oxidation of toluene by ozone over alumina supported manganese oxides: Effect of catalyst loading. Applied Catalysis B: Environmental, 2013, 136-137, 239-247.	10.8	111
13	Photoelectric conversion on Earthâ€™s surface via widespread Fe- and Mn-mineral coatings. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9741-9746.	3.3	111
14	Self-Reconstruction of Co/Co₂P Heterojunctions Confined in N-Doped Carbon Nanotubes for Zincâ€“Air Flow Batteries. ACS Energy Letters, 0, , 1153-1161.	8.8	104
15	Facile synthesis of highly efficient ZnO/ZnFe2O4 photocatalyst using earth-abundant sphalerite and its visible light photocatalytic activity. Applied Catalysis B: Environmental, 2018, 226, 324-336.	10.8	103
16	Effect of reduction temperature of NiMoO3-x/SAPO-11 on its catalytic activity in hydrodeoxygenation of methyl laurate. Applied Catalysis B: Environmental, 2015, 174-175, 253-263.	10.8	95
17	Effects of Si/Al ratio and Pt loading on Pt/SAPO-11 catalysts in hydroconversion of Jatropha oil. Applied Catalysis A: General, 2013, 466, 105-115.	2.2	94
18	Origin of Superionic Li₃Y_{1â€“x}In_x<sub>Cl₆ Halide Solid Electrolytes with High Humidity Tolerance. Nano Letters, 2020, 20, 4384-4392.	4.5	94

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19	Thermodynamic Analysis of Nickel(II) and Zinc(II) Adsorption to Biochar. Environmental Science & Technology, 2018, 52, 6246-6255.	4.6	91
20	Linker-Compensated Metalâ€“Organic Framework with Electron Delocalized Metal Sites for Bifunctional Oxygen Electrocatalysis. Journal of the American Chemical Society, 2022, 144, 4783-4791.	6.6	86
21	A general strategy for preparing pyrrolic-N4 type single-atom catalysts via pre-located isolated atoms. Nature Communications, 2021, 12, 6806.	5.8	81
22	Rates and Mechanisms of Zn²⁺ Adsorption on a Meat and Bonemeal Biochar. Environmental Science & Technology, 2013, 47, 14350-14357.	4.6	77
23	Cobalt (II) oxide nanosheets with rich oxygen vacancies as highly efficient bifunctional catalysts for ultra-stable rechargeable Zn-air flow battery. Nano Energy, 2021, 79, 105409.	8.2	74
24	Effect of surface modification with silica on the structure and activity of Pt/ZSM-22@SiO2 catalysts in hydrodeoxygenation of methyl palmitate. Journal of Catalysis, 2017, 345, 124-134.	3.1	68
25	Generating Oxygen Vacancies in MnO Hexagonal Sheets for Ultralong Life Lithium Storage with High Capacity. ACS Nano, 2019, 13, 2062-2071.	7.3	65
26	Elucidation of the active phase in PtSn/SAPO-11 for hydrodeoxygenation of methyl palmitate. Journal of Catalysis, 2016, 334, 79-88.	3.1	64
27	Mechanisms of the Removal of U(VI) from Aqueous Solution Using Biochar: A Combined Spectroscopic and Modeling Approach. Environmental Science & Technology, 2018, 52, 13057-13067.	4.6	63
28	Cobaltâ€Phthalocyanineâ€Derived Molecular Isolation Layer for Highly Stable Lithium Anode. Angewandte Chemie - International Edition, 2021, 60, 19852-19859.	7.2	62
29	A self-supported electrode as a high-performance binder- and carbon-free cathode for rechargeable hybrid zinc batteries. Energy Storage Materials, 2020, 24, 272-280.	9.5	61
30	Insight into cathode surface to boost the performance of solid-state batteries. Energy Storage Materials, 2021, 35, 661-668.	9.5	59
31	Deciphering the Dynamic Structure Evolution of Fe- and Ni-Codoped CoS₂ for Enhanced Water Oxidation. ACS Catalysis, 2022, 12, 3743-3751.	5.5	59
32	Scalable and controllable synthesis of atomic metal electrocatalysts assisted by an egg-box in alginate. Journal of Materials Chemistry A, 2018, 6, 18417-18425.	5.2	58
33	Effect of noble metals on activity of MnO /Î³-alumina catalyst in catalytic ozonation of toluene. Chemical Engineering Journal, 2013, 214, 219-228.	6.6	57
34	Origin of hetero-nuclear Au-Co dual atoms for efficient acidic oxygen reduction. Applied Catalysis B: Environmental, 2022, 301, 120782.	10.8	57
35	Solution-Phase Structure and Bonding of Au₃₈(SR)₂₄ Nanoclusters from X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 65-69.	1.5	56
36	Structural disorder controlled oxygen vacancy and photocatalytic activity of spinel-type minerals: A case study of ZnFe2O4. Chemical Geology, 2019, 504, 276-287.	1.4	55

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37	Litchi-like porous Fe/N/C spheres with atomically dispersed FeN_x promoted by sulfur as highly efficient oxygen electrocatalysts for Znâ€“air batteries. Journal of Materials Chemistry A, 2018, 6, 4605-4610.	5.2	54
38	Formation and Immobilization of Cr(VI) Species in Long-Term Tannery Waste Contaminated Soils. Environmental Science & Technology, 2020, 54, 7226-7235.	4.6	54
39	Highly Stable Halideâ€Electrolyteâ€Based Allâ€Solidâ€State Liâ€“Se Batteries. Advanced Materials, 2022, 34, e2200856.	11.1	50
40	Atomically Dispersed Fe-Co Bimetallic Catalysts for the Promoted Electroreduction of Carbon Dioxide. Nano-Micro Letters, 2022, 14, 25.	14.4	49
41	Pressure-driven catalyst synthesis of Co-doped Fe C@Carbon nano-onions for efficient oxygen evolution reaction. Applied Catalysis B: Environmental, 2020, 268, 118385.	10.8	48
42	Sizeâ€Mediated Recurring Spinel Subâ€nanodomains in Liâ€and Mnâ€Rich Layered Cathode Materials. Angewandte Chemie - International Edition, 2020, 59, 14313-14320.	7.2	46
43	Extended X-ray Absorption Fine Structure and Density Functional Theory Studies on the Complexation Mechanism of Amidoximate Ligand to Uranyl Carbonate. Industrial & Engineering Chemistry Research, 2016, 55, 4224-4230.	1.8	43
44	A Series of Ternary Metal Chloride Superionic Conductors for Highâ€Performance Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2022, 12, .	10.2	42
45	Reservoirs of Selenium in Coal Waste Rock: Elk Valley, British Columbia, Canada. Environmental Science & Technology, 2015, 49, 8228-8236.	4.6	41
46	Spectroscopic Evidence of Uranium Immobilization in Acidic Wetlands by Natural Organic Matter and Plant Roots. Environmental Science & Technology, 2015, 49, 2823-2832.	4.6	39
47	Molten salt-assisted synthesis of bulk CoOOH as a water oxidation catalyst. Journal of Energy Chemistry, 2020, 42, 5-10.	7.1	38
48	Arsenic speciation in synthetic gypsum (CaSO4Â·2H2O): A synchrotron XAS, single-crystal EPR, and pulsed ENDOR study. Geochimica Et Cosmochimica Acta, 2013, 106, 524-540.	1.6	37
49	Retention and chemical speciation of uranium in an oxidized wetland sediment from the Savannah River Site. Journal of Environmental Radioactivity, 2014, 131, 40-46.	0.9	37
50	PGM-Free Fe/N/C and Ultralow Loading Pt/C Hybrid Cathode Catalysts with Enhanced Stability and Activity in PEM Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 13739-13749.	4.0	36
51	Ultrafast Time-Resolved X-ray Absorption Spectroscopy of Ferrioxalate Photolysis with a Laser Plasma X-ray Source and Microcalorimeter Array. Journal of Physical Chemistry Letters, 2017, 8, 1099-1104.	2.1	35
52	Atomic Layer Deposited Nonâ€Noble Metal Oxide Catalyst for Sodiumâ€“Air Batteries: Tuning the Morphologies and Compositions of Discharge Product. Advanced Functional Materials, 2017, 27, 1606662.	7.8	34
53	Pressure-promoted irregular CoMoP₂ nanoparticles activated by surface reconstruction for oxygen evolution reaction electrocatalysts. Journal of Materials Chemistry A, 2020, 8, 2001-2007.	5.2	34
54	Tissue-specific accumulation and speciation of selenium in rainbow trout (Oncorhynchus mykiss) exposed to elevated dietary selenomethionine. Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2012, 155, 560-565.	1.3	33

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55	Beyond Platinum: Defects Abundant CoP₃/Ni₂P Heterostructure for Hydrogen Evolution Electrocatalysis. Small Science, 2021, 1, 2000027.	5.8	32
56	Uranium Association with Iron-Bearing Phases in Mill Tailings from Gunnar, Canada. Environmental Science & Technology, 2013, 47, 12695-12702.	4.6	31
57	Arsenic Incorporation in Synthetic Struvite (NH₄MgPO₄Â·6H₂O): A Synchrotron XAS and Single-Crystal EPR Study. Environmental Science & Technology, 2013, 47, 12728-12735.	4.6	30
58	Iron-regulated NiPS for enhanced oxygen evolution efficiency. Journal of Materials Chemistry A, 2020, 8, 23580-23589.	5.2	30
59	Low Temperature Catalytic Oxidation of Binary Mixture of Toluene and Acetone in the Presence of Ozone. Catalysis Letters, 2018, 148, 3431-3444.	1.4	29
60	Role of Surface Carboxylates in the Gas Phase Ozone-Assisted Catalytic Oxidation of Toluene. Catalysis Letters, 2017, 147, 2421-2433.	1.4	28
61	Micro-nanostructured Î´-Bi2O3 with surface oxygen vacancies as superior adsorbents for SeOx2â¯ ions. Journal of Hazardous Materials, 2018, 360, 279-287.	6.5	27
62	Sequestration of Selenite and Selenate in Gypsum (CaSO₄Â·2H₂O): Insights from the Single-Crystal Electron Paramagnetic Resonance Spectroscopy and Synchrotron X-ray Absorption Spectroscopy Study. Environmental Science & Technology, 2020, 54, 3169-3180.	4.6	27
63	Li-ion storage dynamics in metastable nanostructured Li2FeSiO4 cathode: Antisite-induced phase transition and lattice oxygen participation. Journal of Power Sources, 2016, 329, 355-363.	4.0	26
64	NiMo nitride supported on Î³-Al2O3 for hydrodeoxygenation of oleic acid: Novel characterization and activity study. Catalysis Today, 2017, 291, 153-159.	2.2	25
65	Reusable magnetite nanoparticlesâ€“biochar composites for the efficient removal of chromate from water. Scientific Reports, 2020, 10, 19007.	1.6	25
66	Characterizing Zinc Speciation in Soils from a Smelter-Affected Boreal Forest Ecosystem. Journal of Environmental Quality, 2016, 45, 684-692.	1.0	24
67	Electron paramagnetic resonance spectroscopic study of synthetic fluorapatite: Part I. Local structural environment and substitution mechanism of Gd³⁺at the Ca2 site. American Mineralogist, 2002, 87, 37-46.	0.9	23
68	Influence of heavy metal sorption pathway on the structure of biogenic birnessite: Insight from the band structure and photostability. Geochimica Et Cosmochimica Acta, 2019, 256, 116-134.	1.6	23
69	Square-pyramidal Fe-N4 with defect-modulated O-coordination: Two-tier electronic structure fine-tuning for enhanced oxygen reduction. Chem Catalysis, 2022, 2, 816-835.	2.9	23
70	Geochemical characteristics of oil sands fluid petroleum coke. Applied Geochemistry, 2017, 76, 148-158.	1.4	22
71	Uptake and speciation of uranium in synthetic gypsum (CaSO 4 â€¢2H 2 O): Applications to radioactive mine tailings. Journal of Environmental Radioactivity, 2018, 181, 8-17.	0.9	22
72	Non-Noble-Metal Catalyst of Cu/g-C₃N₄ for Efficient Photocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2021, 4, 13796-13802.	2.5	22

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73	Electron paramagnetic resonance spectroscopic study of synthetic fluorapatite: Part II. Gd³⁺at the Ca1 site, with a neighboring Ca2 vacancy. American Mineralogist, 2002, 87, 47-55.	0.9	20
74	Novel Superstructure-Phase Two-Dimensional Material 1T-VSe2 at High Pressure. Journal of Physical Chemistry Letters, 2020, 11, 380-386.	2.1	17
75	Synthesis and crystal structure of a new open-framework iron phosphate (NH4)4Fe3(OH)2F2[H3(PO4)4]: Novel linear trimer of corner-sharing Fe(III) octahedra. Journal of Solid State Chemistry, 2010, 183, 2763-2769.	1.4	16
76	The effect of Ni on the kinetics of electroless Cu film deposition. Thin Solid Films, 2017, 626, 131-139.	0.8	16
77	Room temperature oxidation of acetone by ozone over alumina-supported manganese and cobalt mixed oxides. Frontiers of Chemical Science and Engineering, 2020, 14, 937-947.	2.3	16
78	Uranyl binding mechanism in microcrystalline silicas: A potential missing link for uranium mineralization by direct uranyl co-precipitation and environmental implications. Geochimica Et Cosmochimica Acta, 2021, 292, 518-531.	1.6	16
79	Highly active g-C₃N₄photocatalysts modified with transition metal cobalt for hydrogen evolution. Journal of Materials Chemistry C, 2021, 9, 4378-4384.	2.7	16
80	Iron pairs in beryl: New insights from electron paramagnetic resonance, synchrotron X-ray absorption spectroscopy, and ab initio calculations. American Mineralogist, 2013, 98, 1745-1753.	0.9	15
81	Cu(<scp>ii</scp>) sorption by biogenic birnessite produced byPseudomonas putidastrain MnB1: structural differences from abiotic birnessite and its environmental implications. CrystEngComm, 2018, 20, 1361-1374.	1.3	15
82	Iodine speciation in a silver-amended cementitious system. Environment International, 2019, 126, 576-584.	4.8	15
83	Spontaneous reaction between an uncharged lithium iron silicate cathode and a LiPF₆-based electrolyte. Chemical Communications, 2016, 52, 190-193.	2.2	14
84	Mechanism of Gd3+ uptake in gypsum (CaSO4Â·2H2O): Implications for EPR dating, REE recovery and REE behavior. Geochimica Et Cosmochimica Acta, 2019, 258, 63-78.	1.6	13
85	FCC tantalum thin films deposited by magnetron sputtering. Surface and Coatings Technology, 2019, 358, 942-946.	2.2	13
86	Elucidating the reaction pathway of crystalline multi-metal borides for highly efficient oxygen-evolving electrocatalysts. Journal of Materials Chemistry A, 2022, 10, 1569-1578.	5.2	13
87	Arsenic Speciation in Newberyite (MgHPO₄Â·3H₂O) Determined by Synchrotron X-ray Absorption and Electron Paramagnetic Resonance Spectroscopies: Implications for the Fate of Arsenic in Green Fertilizers. Environmental Science & Technology, 2014, 48, 6938-6946.	4.6	12
88	Rational synthesis of CaCo2O4 nanoplate as an earth-abundant electrocatalyst for oxygen evolution reaction. Journal of Energy Chemistry, 2019, 31, 125-131.	7.1	12
89	Diamond nucleation and growth on WC-Co inserts with Cr 2 O 3 -Cr interlayer. Surface and Coatings Technology, 2018, 340, 190-198.	2.2	11
90	Lead (Pb) sorption to hydrophobic and hydrophilic zeolites in the presence and absence of MTBE. Journal of Hazardous Materials, 2021, 420, 126528.	6.5	11

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91	Non-Henryâ€™s Law behavior of REE partitioning between fluorapatite and CaF2-rich melts: Controls of intrinsic vacancies and implications for natural apatites. Geochimica Et Cosmochimica Acta, 2003, 67, 1889-1900.	1.6	9
92	X-ray induced synthesis of a novel material: Stable, doped solid CO at ambient conditions. Chemical Physics Letters, 2017, 686, 183-188.	1.2	9
93	A Multidimensional Topotactic Host Composite Anode Toward Transparent Flexible Potassium-Ion Microcapacitors. ACS Applied Materials & Interfaces, 2022, 14, 1478-1488.	4.0	9
94	Uranium-Induced Changes in Crystal-Field and Covalency Effects of Th4+ in Th1â€“xUxO2 Mixed Oxides Probed by High-Resolution X-ray Absorption Spectroscopy. Inorganic Chemistry, 2018, 57, 11404-11413.	1.9	8
95	Molecular Interaction of Aqueous Iodine Species with Humic Acid Studied by I and C K-Edge X-ray Absorption Spectroscopy. Environmental Science & Technology, 2019, 53, 12416-12424.	4.6	8
96	Revealing Dopant Local Structure of Se-Doped Black Phosphorus. Chemistry of Materials, 2021, 33, 2029-2036.	3.2	8
97	Pressure-driven suppression of the Jahnâ€“Teller effects and structural changes in cupric oxide. Journal of Physics Condensed Matter, 2016, 28, 025401.	0.7	7
98	Fingerprint Feature of Atomic Intermixing in Supported AuPd Nanocatalysts Probed by X-ray Absorption Fine Structure. Journal of Physical Chemistry C, 2017, 121, 28385-28394.	1.5	7
99	Spectroscopic and Modeling Investigation of Sorption of Pb(II) to ZSM-5 Zeolites. ACS ES&T Water, 2021, 1, 108-116.	2.3	7
100	Photo-stimulated anoxic reduction of birnessite (Î´-MnO2) by citrate and its fine structural responses: Insights on a proton-promoted photoelectron transfer process. Chemical Geology, 2021, 561, 120029.	1.4	7
101	Enhancing Catalytic Ozonation of Acetone and Toluene in Air Using MnO_x/Al₂O₃ Catalysts at Room Temperature. Industrial & Engineering Chemistry Research, 2021, 60, 12252-12264.	1.8	7
102	Local structure investigation of Ga and Yb dopants in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>4</mml:mn></mml: skutterudites. Physical Review B, 2017, 96, .	1.4	6
103	Oxygen atom release during selenium oxyanion adsorption on goethite and hematite. Applied Geochemistry, 2020, 117, 104605.	1.4	6
104	Operando Studies of Iodine Species in an Advanced Oxidative Water Treatment Reactor. ACS ES&T Water, 2021, 1, 2293-2304.	2.3	5
105	Cu Electrodeposition on Nanostructured MoS₂ and WS₂ and Implications for HER Active Site Determination. Journal of the Electrochemical Society, 2020, 167, 116517.	1.3	5
106	Electron Paramagnetic Resonance and Synchrotron X-ray Absorption Spectroscopy for Highly Sensitive Characterization of Calcium Arsenates. Environmental Science & Technology, 2022, 56, 5563-5571.	4.6	4
107	Arsenic speciation in danburite (CaB2Si2O8): a synchrotron XAS and single-crystal EPR study. European Journal of Mineralogy, 2014, 26, 113-125.	0.4	3
108	Effects of Dolomitic Limestone Application on Zinc Speciation in Boreal Forest Smelterâ€Contaminated Soils. Journal of Environmental Quality, 2016, 45, 1894-1900.	1.0	3

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109	Competing Sorption of Se(IV) and Se(VI) on Schwertmannite. Minerals (Basel, Switzerland), 2021, 11, 764.	0.8	3
110	Single-step Hydroconversion of Jatropha Oil to High Quality Fuel Oil over Reduced Nickel-Molybdenum Catalysts. Journal of the Japan Petroleum Institute, 2013, 56, 249-252.	0.4	2
111	XAS characterization of nano-chromite particles precipitated on magnetite-biochar composites. Radiation Physics and Chemistry, 2020, 175, 108544.	1.4	2
112	Highly Active Sites in Quaternary LnPdAsO (Ln = La, Ce, Pr) with Excellent Catalytic Activity for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 4302-4307.	2.5	2
113	Interaction between filler species in double-filled skutterudites. Physical Review Materials, 2018, 2, .	0.9	2
114	Molecular Structure of Molybdate Adsorption on Goethite at pH 5â€“8: A Combined DFT + U, EXAFS, and Ab Initio XANES Study. Journal of Physical Chemistry C, 2021, 125, 22052-22063.	1.5	2
115	In Operando XANES & XRD Investigation into the Rate-Dependent Transport Properties of Lithium Iron Silicate Cathodes. MRS Advances, 2017, 2, 419-424.	0.5	1
116	Anharmonicity in partially filled skutterudites YbxCo4Sb12. Journal of Applied Physics, 2021, 130, 185105.	1.1	1
117	CLS HXMA 2.0 T superconducting Wiggler upgrades. AIP Conference Proceedings, 2019, , .	0.3	0
118	Structure Determination, Mechanical Properties, Thermal Stability of Co2MoB4 and Fe2MoB4. Materials, 2022, 15, 3031.	1.3	0