Mingyong Wang

List of Publications by Year
in descending order

93 papers	3,176 citations	218677 26 h-index	168389 53 g-index
96 all docs	96 docs citations	96 times ranked	3152 citing authors

#	Article	IF	Citations
1	Controllable preparation of dual-phase VC-C through in-situ electroconversion for lithium storage. Ceramics International, 2022, 48, 1024-1031.	4.8	3
2	Stable and low-voltage-hysteresis zinc negative electrode promoting aluminum dual-ion batteries. Chemical Engineering Journal, 2022, 430, 132743.	12.7	8
3	Photo-electrochemical enhanced mechanism enables a fast-charging and high-energy aqueous Al/MnO2 battery. Energy Storage Materials, 2022, 45, 586-594.	18.0	19
4	Self-supporting and dual-active 3D Co-S nanosheets constructed by ligand replacement reaction from MOF for rechargeable Al battery. Journal of Energy Chemistry, 2022, 69, 35-43.	12.9	12
5	Electrocatalysis for Continuous Multiâ€Step Reactions in Quasiâ€Solidâ€State Electrolytes Towards Highâ€Energy and Longâ€Life Aluminumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	21
6	Electrocatalysis for Continuous Multiâ€Step Reactions in Quasiâ€Solidâ€State Electrolytes Towards Highâ€Energy and Longâ€Life Aluminumâ€“Sulfur Batteries. Angewandte Chemie, 2022, 134, .	2.0	3
7	Self-supporting and hierarchically porous NixFeâ€"S/NiFe2O4 heterostructure as a bifunctional electrocatalyst for fluctuating overall water splitting. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1120-1131.	4.9	7
8	Design Strategies of Highâ€Performance Positive Materials for Nonaqueous Rechargeable Aluminum Batteries: From Crystal Control to Battery Configuration. Small, 2022, 18, .	10.0	15
9	Facile preparation of metallic vanadium from consumable V2CO solid solution by molten salt electrolysis. Separation and Purification Technology, 2022, 295, 121361.	7.9	4
10	Ultraâ€High Temperature Molten Oxide Electrochemistry. Angewandte Chemie - International Edition, 2022, 61, .	13.8	4
11	Ultraâ€High Temperature Molten Oxide Electrochemistry. Angewandte Chemie, 2022, 134, .	2.0	1
12	Hierarchical N-doped porous carbon hosts for stabilizing tellurium in promoting Al-Te batteries. Journal of Energy Chemistry, 2021, 57, 378-385.	12.9	23
13	Al homogeneous deposition induced by N-containing functional groups for enhanced cycling stability of Al-ion battery negative electrode. Nano Research, 2021, 14, 646-653.	10.4	19
14	Coordination interaction boosts energy storage in rechargeable Al battery with a positive electrode material of CuSe. Chemical Engineering Journal, 2021, 421, 127792.	12.7	28
15	Green and sustainable molten salt electrochemistry for the conversion of secondary carbon pollutants to advanced carbon materials. Journal of Materials Chemistry A, 2021, 9, 14119-14146.	10.3	32
16	Nonaqueous Rechargeable Aluminum Batteries: Progresses, Challenges, and Perspectives. Chemical Reviews, 2021, 121, 4903-4961.	47.7	147
17	Effects of ultrasonic field on structure evolution of Ni film electrodeposited by bubble template method for hydrogen evolution electrocatalysis. Journal of Solid State Electrochemistry, 2021, 25, 2201-2212.	2.5	12
18	Green preparation of vanadium carbide through one-step molten salt electrolysis. Ceramics International, 2021, 47, 28203-28209.	4.8	13

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19	Dual-phase MoC-Mo2C nanosheets prepared by molten salt electrochemical conversion of CO2 as excellent electrocatalysts for the hydrogen evolution reaction. Nano Energy, 2021, 90, 106533.	16.0	48
20	Electrochemical Behaviors of Consumable Ti₂CO@Al₂O₃ Anode for Ti Extraction by USTB Process. Journal of the Electrochemical Society, 2021, 168, 103508.	2.9	2
21	Quantificational 4D Visualization of Industrial Electrodeposition. Advanced Science, 2021, 8, e2101373.	11.2	9
22	Self-supporting 3D hierarchically porous CuNiâ€“S cathodes with a dual-phase structure for rechargeable Al battery. Sustainable Energy and Fuels, 2021, 5, 6328-6337.	4.9	8
23	Modified separators for rechargeable high-capacity selenium-aluminium batteries. Chemical Engineering Journal, 2020, 385, 123452.	12.7	36
24	Electrochemical graphitization conversion of CO2 through soluble NaVO3 homogeneous catalyst in carbonate molten salt. Electrochimica Acta, 2020, 331, 135461.	5.2	26
25	Solidâ€“Liquid Coexisting LiNO₃ Electrolyte for Extremely Stable Lithium Metal Anodes on a Bare Cu Foil. ACS Sustainable Chemistry and Engineering, 2020, 8, 706-713.	6.7	11
26	Liquid gallium as long cycle life and recyclable negative electrode for Al-ion batteries. Chemical Engineering Journal, 2020, 391, 123594.	12.7	25
27	Active cyano groups to coordinate AlCl2+ cation for rechargeable aluminum batteries. Energy Storage Materials, 2020, 33, 250-257.	18.0	49
28	Coral-Like TeO₂ Microwires for Rechargeable Aluminum Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 2416-2422.	6.7	29
29	Sb₂Te₃ Hexagonal Nanosheets as High-Capacity Positive Materials for Rechargeable Aluminum Batteries. ACS Applied Energy Materials, 2020, 3, 12635-12643.	5.1	7
30	Nonmetal Current Collectors: The Key Component for Highâ€Energyâ€Density Aluminum Batteries. Advanced Materials, 2020, 32, e2001212.	21.0	26
31	A strategy for massively suppressing the shuttle effect in rechargeable Alâ€“Te batteries. Inorganic Chemistry Frontiers, 2020, 7, 4000-4009.	6.0	8
32	Stable Interface between a NaClâ€“AlCl₃ Melt and a Liquid Ga Negative Electrode for a Long-Life Stationary Al-Ion Energy Storage Battery. ACS Applied Materials & Interfaces, 2020, 12, 15063-15070.	8.0	12
33	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. ACS Nano, 2020, 14, 3469-3476.	14.6	70
34	Self-supporting and high-loading hierarchically porous Co-P cathode for advanced Al-ion battery. Chemical Engineering Journal, 2020, 389, 124370.	12.7	38
35	Electrochemical behavior of NiCl₂/Ni in acidic AlCl₃-based ionic liquid electrolyte. Inorganic Chemistry Frontiers, 2020, 7, 1909-1917.	6.0	8
36	Binder-free 3D porous Fe3O4â€“Fe2Pâ€“Fe@C films as high-performance anode materials for lithium-ion batteries. Ceramics International, 2020, 46, 17469-17477.	4.8	20

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37	The Dependence and Evolution Mechanism of Surface Structure of Electrodeposited Ni Films on Wettability. Journal of the Electrochemical Society, 2020, 167, 063506.	2.9	7
38	Freestanding hierarchically 3D porous Co2P-Co@C films with superior electrochemical kinetics for enhanced lithium-ion batteries anode performance. Applied Surface Science, 2020, 518, 146220.	6.1	22
39	Rapid Electrodeposition of Ti on a Liquid Zn Cathode from a Consumable Casting TiC_{0.5}O_{0.5} Anode. Journal of the Electrochemical Society, 2020, 167, 123502.	2.9	9
40	Single-crystal and hierarchical VSe₂ as an aluminum-ion battery cathode. Sustainable Energy and Fuels, 2019, 3, 2717-2724.	4.9	26
41	Hierarchical Flower-Like MoS₂ Microspheres and Their Efficient Al Storage Properties. Journal of Physical Chemistry C, 2019, 123, 26794-26802.	3.1	20
42	Cu-Al Composite as the Negative Electrode for Long-life Al-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3539-A3545.	2.9	20
43	Metalâ€“Organic Framework-Derived Co₃O₄@MWCNTs Polyhedron as Cathode Material for a High-Performance Aluminum-Ion Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 16200-16208.	6.7	55
44	Depolarization Behavior of Ti Deposition at Liquid Metal Cathodes in a NaCl-KCl-KF Melt. Journal of the Electrochemical Society, 2019, 166, E401-E406.	2.9	6
45	Sustainable One-Step Conversion of Soluble NaVO₃ into CaV₂O₄ through Molten Salt Electrolysis. Journal of the Electrochemical Society, 2019, 166, E407-E411.	2.9	7
46	Self-supporting lithiophilic N-doped carbon rod array for dendrite-free lithium metal anode. Chemical Engineering Journal, 2019, 363, 270-277.	12.7	41
47	High-efficiency transformation of amorphous carbon into graphite nanoflakes for stable aluminum-ion battery cathodes. Nanoscale, 2019, 11, 12537-12546.	5.6	61
48	Rechargeable ultrahigh-capacity telluriumâ€“aluminum batteries. Energy and Environmental Science, 2019, 12, 1918-1927.	30.8	172
49	Improved USTB Titanium Production with a Ti₂CO Anode Formed by Casting. Journal of the Electrochemical Society, 2019, 166, E226-E230.	2.9	13
50	The potential application of black and blue phosphorene as cathode materials in rechargeable aluminum batteries: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 7021-7028.	2.8	24
51	Cu₃P as a novel cathode material for rechargeable aluminum-ion batteries. Journal of Materials Chemistry A, 2019, 7, 8368-8375.	10.3	85
52	Nickel Phosphide Nanosheets Supported on Reduced Graphene Oxide for Enhanced Aluminum-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 6004-6012.	6.7	61
53	Self-Supporting Dendritic Copper Porous Film Inducing the Lateral Growth of Metallic Lithium for Highly Stable Li Metal Battery. Journal of the Electrochemical Society, 2019, 166, A4073-A4079.	2.9	3
54	Direct preparation of V-Al alloy by molten salt electrolysis of soluble NaVO3 on a liquid Al cathode. Journal of Alloys and Compounds, 2019, 779, 22-29.	5.5	29

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55	Roles of Ultrasound on Hydroxyl Radical Generation and Bauxite Desulfurization from Water Electrolysis. Journal of the Electrochemical Society, 2018, 165, E177-E183.	2.9	10
56	Hierarchical oxygen-implanted MoS2 nanoparticle decorated graphene for the non-enzymatic electrochemical sensing of hydrogen peroxide in alkaline media. Talanta, 2018, 176, 397-405.	5.5	64
57	Facile synthesis of Ni₁₁(HPO₃)₈(OH)₆/rGO nanorods with enhanced electrochemical performance for aluminum-ion batteries. Nanoscale, 2018, 10, 21284-21291.	5.6	34
58	NiCo₂S₄ Nanosheet with Hexagonal Architectures as an Advanced Cathode for Al-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A3504-A3509.	2.9	21
59	A Convenient Electrochemical Method for Preparing Carbon Nanotubes Filled with Amorphous Boron. Journal of the Electrochemical Society, 2018, 165, E879-E882.	2.9	6
60	Ni0.36Al0.10Cu0.30Fe0.24 Metallic Inert Anode for the Electrochemical Production of Fe-Ni Alloy in Molten K2CO3-Na2CO3. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3424-3431.	2.1	7
61	Selfâ€Supporting Porous CoPâ€Based Films with Phaseâ€Separation Structure for Ultrastable Overall Water Electrolysis at Large Current Density. Advanced Energy Materials, 2018, 8, 1802445.	19.5	114
62	Production of AlCrNbTaTi High Entropy Alloy via Electro-Deoxidation of Metal Oxides. Journal of the Electrochemical Society, 2018, 165, D574-D579.	2.9	27
63	Direct Electrodeposition of Ga and the Simultaneous Production of NaOH and NaHCO₃ from Carbonated Spent Liquor by Membrane Electrolysis. Industrial & Engineering Chemistry Research, 2018, 57, 12583-12589.	3.7	3
64	Facile Electrochemical Preparation of Al-Sm Alloys in Molten Calcium Chloride. Journal of the Electrochemical Society, 2018, 165, E616-E621.	2.9	3
65	The corrosion behavior of a Ni0.91Cr0.04Cu0.05 anode for the electroreduction of Fe2O3 in molten NaOH. Journal of Alloys and Compounds, 2018, 769, 977-982.	5.5	8
66	Electrochemical Conversions of Soluble Borates to CaB₆with Superior Optical Property in NaCl-CaCl₂Melt. Journal of the Electrochemical Society, 2018, 165, E477-E483.	2.9	9
67	Adjustment of Induced Time by Electrochemical Activation of Electrode Surface for Rapid Ga Electrodeposition. Journal of the Electrochemical Society, 2018, 165, D307-D312.	2.9	6
68	Hierarchically 3D porous films electrochemically constructed on gasâ€“liquidâ€“solid three-phase interface for energy application. Journal of Materials Chemistry A, 2017, 5, 9488-9513.	10.3	76
69	Competition of Oxygen Evolution and Desulfurization for Bauxite Electrolysis. Industrial & Engineering Chemistry Research, 2017, 56, 6136-6144.	3.7	15
70	Electrochemical preparation of V2O3 from NaVO3 and its reduction mechanism. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 1019-1024.	1.0	10
71	Mechanism Analysis of Carbon Contamination and the Inhibition by an Anode Structure during Soluble K₂CrO₄Electrolysis in CaCl₂-KCl Molten Salt. Journal of the Electrochemical Society, 2017, 164, E360-E366.	2.9	16
72	Time-Dependent Surface Structure Evolution of NiMo Films Electrodeposited Under Super Gravity Field as Electrocatalyst for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2017, 121, 16792-16802.	3.1	20

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73	Electrochemical Reduction Behavior of Soluble CaTiO₃in Na₃AlF₆-AlF₃Melt for the Preparation of Metal Titanium. Journal of the Electrochemical Society, 2017, 164, D551-D557.	2.9	25
74	Roles of Electrolyte Characterization on Bauxite Electrolysis Desulfurization with Regeneration and Recycling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 726-732.	2.1	14
75	Direct electro-deposition of metallic chromium from K2CrO4 in the equimolar CaCl2-KCl molten salt and its reduction mechanism. Electrochimica Acta, 2016, 212, 162-170.	5.2	32
76	Desulfurization from Bauxite Water Slurry (BWS) Electrolysis. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 649-656.	2.1	10
77	3D multi-structural porous NiAg films with nanoarchitecture walls: high catalytic activity and stability for hydrogen evolution reaction. Electrochimica Acta, 2016, 211, 900-910.	5.2	44
78	Thermodynamic analysis on the direct preparation of metallic vanadium from NaVO3 by molten salt electrolysis. Chinese Journal of Chemical Engineering, 2016, 24, 671-676.	3.5	22
79	Alumina Hydrate Polymorphism Control in Alâ€"Water Reaction Crystallization by Seeding to Change the Metastable Zone Width. Crystal Growth and Design, 2016, 16, 1056-1062.	3.0	16
80	The structure evolution mechanism of electrodeposited porous Ni films on NH4Cl concentration. Applied Surface Science, 2016, 360, 502-509.	6.1	60
81	One-step electrochemical preparation of metallic vanadium from sodium metavanadate in molten chlorides. International Journal of Refractory Metals and Hard Materials, 2016, 55, 47-53.	3.8	29
82	Progress toward Electrochemistry Intensified by using Supergravity Fields. ChemElectroChem, 2015, 2, 1879-1887.	3.4	20
83	Facile one-step electrodeposition preparation of porous NiMo film as electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2015, 40, 2173-2181.	7.1	72
84	Sulfur removal from bauxite water slurry (BWS) electrolysis intensified by ultrasonic. Ultrasonics Sonochemistry, 2015, 26, 142-148.	8.2	19
85	Deposit structure and kinetic behavior of metal electrodeposition under enhanced gravity-induced convection. Journal of Electroanalytical Chemistry, 2015, 744, 25-31.	3.8	15
86	Corrosion behavior of 316L stainless steel anode in alkaline sulfide solutions and the consequent influence on Ga electrowinning. Hydrometallurgy, 2015, 157, 285-291.	4.3	12
87	The corrosion resistance of Ni anode and Ga electrowinning in alkaline sulfide solutions. Journal of Applied Electrochemistry, 2015, 45, 1255-1263.	2.9	6
88	The intensification technologies to water electrolysis for hydrogen production â€" A review. Renewable and Sustainable Energy Reviews, 2014, 29, 573-588.	16.4	705
89	The influence of impurities on Ga electrowinning: Vanadium and iron. Hydrometallurgy, 2014, 146, 76-81.	4.3	15
90	Electrodeposited free-crack NiW films under super gravity filed: Structure and excellent corrosion property. Materials Chemistry and Physics, 2014, 148, 245-252.	4.0	32

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91	Influences of Super-Gravity Field on Aluminum Grain Refining. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 670-675.	2.2	47
92	Removal of Low-Content Impurities from Al By Super-Gravity. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2010, 41, 505-508.	2.1	68
93	N-doped carbon-coated freestanding Fe film with sea urchin-like micro/nano-porous structure for efficient oxygen evolution reaction catalyst. Functional Materials Letters, 0, , .	1.2	0