Mingyong Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4907230/publications.pdf

Version: 2024-02-01

93	3,176	218677	168389
papers	citations	26 h-index	53 g-index

96	96	96	3152
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The intensification technologies to water electrolysis for hydrogen production â€“ A review. Renewable and Sustainable Energy Reviews, 2014, 29, 573-588.	16.4	705
2	Rechargeable ultrahigh-capacity telluriumâ€“aluminum batteries. Energy and Environmental Science, 2019, 12, 1918-1927.	30.8	172
3	Nonaqueous Rechargeable Aluminum Batteries: Progresses, Challenges, and Perspectives. Chemical Reviews, 2021, 121, 4903-4961.	47.7	147
4	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
5	Cu₃P as a novel cathode material for rechargeable aluminum-ion batteries. Journal of Materials Chemistry A, 2019, 7, 8368-8375.	10.3	85
6	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
7	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
8	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. ACS Nano, 2020, 14, 3469-3476.	14.6	70
9	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
10	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
11	High-efficiency transformation of amorphous carbon into graphite nanoflakes for stable aluminum-ion battery cathodes. Nanoscale, 2019, 11, 12537-12546.	5.6	61
12	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
13	The structure evolution mechanism of electrodeposited porous Ni films on NH4Cl concentration. Applied Surface Science, 2016, 360, 502-509.	6.1	60
14	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
15	Active cyano groups to coordinate AlCl2+ cation for rechargeable aluminum batteries. Energy Storage Materials, 2020, 33, 250-257.	18.0	49
16	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
17	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
18	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

#	Article	IF	Citations
19	Self-supporting lithiophilic N-doped carbon rod array for dendrite-free lithium metal anode. Chemical Engineering Journal, 2019, 363, 270-277.	12.7	41
20	Self-supporting and high-loading hierarchically porous Co-P cathode for advanced Al-ion battery. Chemical Engineering Journal, 2020, 389, 124370.	12.7	38
21	Modified separators for rechargeable high-capacity selenium-aluminium batteries. Chemical Engineering Journal, 2020, 385, 123452.	12.7	36
22	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
23	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
24	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
25	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
26	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
27	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
28	Coral-Like TeO₂ Microwires for Rechargeable Aluminum Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 2416-2422.	6.7	29
29	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
30	Production of AlCrNbTaTi High Entropy Alloy via Electro-Deoxidation of Metal Oxides. Journal of the Electrochemical Society, 2018, 165, D574-D579.	2.9	27
31	Single-crystal and hierarchical VSe₂ as an aluminum-ion battery cathode. Sustainable Energy and Fuels, 2019, 3, 2717-2724.	4.9	26
32	Electrochemical graphitization conversion of CO2 through soluble NaVO3 homogeneous catalyst in carbonate molten salt. Electrochimica Acta, 2020, 331, 135461.	5.2	26
33	Nonmetal Current Collectors: The Key Component for Highâ€Energyâ€Density Aluminum Batteries. Advanced Materials, 2020, 32, e2001212.	21.0	26
34	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
35	Liquid gallium as long cycle life and recyclable negative electrode for Al-ion batteries. Chemical Engineering Journal, 2020, 391, 123594.	12.7	25
36	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

#	Article	IF	Citations
37	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
38	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
39	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
40	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
41	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
42	Progress toward Electrochemistry Intensified by using Supergravity Fields. ChemElectroChem, 2015, 2, 1879-1887.	3.4	20
43	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
44	Hierarchical Flower-Like MoS₂ Microspheres and Their Efficient Al Storage Properties. Journal of Physical Chemistry C, 2019, 123, 26794-26802.	3.1	20
45	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
46	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
47	Sulfur removal from bauxite water slurry (BWS) electrolysis intensified by ultrasonic. Ultrasonics Sonochemistry, 2015, 26, 142-148.	8.2	19
48	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
49	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
50	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
51	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
52	The influence of impurities on Ga electrowinning: Vanadium and iron. Hydrometallurgy, 2014, 146, 76-81.	4.3	15
53	Deposit structure and kinetic behavior of metal electrodeposition under enhanced gravity-induced convection. Journal of Electroanalytical Chemistry, 2015, 744, 25-31.	3.8	15
54	Competition of Oxygen Evolution and Desulfurization for Bauxite Electrolysis. Industrial & Engineering Chemistry Research, 2017, 56, 6136-6144.	3.7	15

#	Article	IF	Citations
55	Design Strategies of Highâ€Performance Positive Materials for Nonaqueous Rechargeable Aluminum Batteries: From Crystal Control to Battery Configuration. Small, 2022, 18, .	10.0	15
56	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
57	Improved USTB Titanium Production with a Ti₂CO Anode Formed by Casting. Journal of the Electrochemical Society, 2019, 166, E226-E230.	2.9	13
58	Green preparation of vanadium carbide through one-step molten salt electrolysis. Ceramics International, 2021, 47, 28203-28209.	4.8	13
59	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
60	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
61	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
62	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
63	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
64	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
65	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
66	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
67	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
68	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
69	Quantificational 4D Visualization of Industrial Electrodeposition. Advanced Science, 2021, 8, e2101373.	11.2	9
70	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
71	A strategy for massively suppressing the shuttle effect in rechargeable Alâ€“Te batteries. Inorganic Chemistry Frontiers, 2020, 7, 4000-4009.	6.0	8
72	Electrochemical behavior of NiCl₂/Ni in acidic AlCl₃-based ionic liquid electrolyte. Inorganic Chemistry Frontiers, 2020, 7, 1909-1917.	6.0	8

#	Article	IF	Citations
73	Stable and low-voltage-hysteresis zinc negative electrode promoting aluminum dual-ion batteries. Chemical Engineering Journal, 2022, 430, 132743.	12.7	8
74	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
75	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
76	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
77	Sb₂Te₃ Hexagonal Nanosheets as High-Capacity Positive Materials for Rechargeable Aluminum Batteries. ACS Applied Energy Materials, 2020, 3, 12635-12643.	5.1	7
78	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
79	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
80	The corrosion resistance of Ni anode and Ga electrowinning in alkaline sulfide solutions. Journal of Applied Electrochemistry, 2015, 45, 1255-1263.	2.9	6
81	A Convenient Electrochemical Method for Preparing Carbon Nanotubes Filled with Amorphous Boron. Journal of the Electrochemical Society, 2018, 165, E879-E882.	2.9	6
82	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
83	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
84	Facile preparation of metallic vanadium from consumable V2CO solid solution by molten salt electrolysis. Separation and Purification Technology, 2022, 295, 121361.	7.9	4
85	Ultraâ€High Temperature Molten Oxide Electrochemistry. Angewandte Chemie - International Edition, 2022, 61, .	13.8	4
86	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
87	Facile Electrochemical Preparation of Al-Sm Alloys in Molten Calcium Chloride. Journal of the Electrochemical Society, 2018, 165, E616-E621.	2.9	3
88	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
89	Controllable preparation of dual-phase VC-C through in-situ electroconversion for lithium storage. Ceramics International, 2022, 48, 1024-1031.	4.8	3
90	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

#	Article	IF	Citations
91	Electrochemical Behaviors of Consumable Ti₂CO@Al₂O₃ Anode for Ti Extraction by USTB Process. Journal of the Electrochemical Society, 2021, 168, 103508.	2.9	2
92	Ultraâ€High Temperature Molten Oxide Electrochemistry. Angewandte Chemie, 2022, 134, .	2.0	1
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