**Electrocatalysis (2022-2024)**

[Browse in the web](https://link.springer.com/collections/eiigidchdd)

1. **Durable Ru Nanocrystal with HfO2 Modification for Acidic Overall Water Splitting (Article)**

Xiangkai Kong, Jie Xu, Zhicheng Ju & Changle Chen

Nano-Micro Lett. 16, 185 (2024). <https://doi.org/10.1007/s40820-024-01384-7>

1. **Rational Design of Cost-Effective Metal-Doped ZrO2 for Oxygen Evolution Reaction (Article)**

Yuefeng Zhang, Tianyi Wang, Liang Mei, Ruijie Yang, Weiwei Guo, Hao Li & Zhiyuan Zeng

Nano-Micro Lett. 16, 180 (2024). <https://doi.org/10.1007/s40820-024-01403-7>

1. **Accelerating Oxygen Electrocatalysis Kinetics on Metal–Organic Frameworks via Bond Length Optimization (Article)**

Fan He, Yingnan Liu, Xiaoxuan Yang, Yaqi Chen, Cheng-Chieh Yang, Chung-Li Dong, Qinggang He, Bin Yang, Zhongjian Li, Yongbo Kuang, Lecheng Lei, Liming Dai & Yang Hou

Nano-Micro Lett. 16, 175 (2024). <https://doi.org/10.1007/s40820-024-01382-9>

1. **Design Principles and Mechanistic Understandings of Non-Noble-Metal Bifunctional Electrocatalysts for Zinc–Air Batteries (Review)**

Yunnan Gao, Ling Liu, Yi Jiang, Dexin Yu, Xiaomei Zheng, Jiayi Wang, Jingwei Liu, Dan Luo, Yongguang Zhang, Zhenjia Shi, Xin Wang, Ya-Ping Deng & Zhongwei Chen

Nano-Micro Lett. 16, 162 (2024). <https://doi.org/10.1007/s40820-024-01366-9>

1. **Current Status and Perspectives of Dual-Atom Catalysts Towards Sustainable Energy Utilization (Review)**

Yizhe Li, Yajie Li, Hao Sun, Liyao Gao, Xiangrong Jin, Yaping Li, Zhi LV, Lijun Xu, Wen Liu & Xiaoming Sun

Nano-Micro Lett. 16, 139 (2024). <https://doi.org/10.1007/s40820-024-01347-y>

1. **Recent Advances in Mechanistic Understanding of Metal-Free Carbon Thermocatalysis and Electrocatalysis with Model Molecules (Review)**

Wei Guo, Linhui Yu, Ling Tang, Yan Wan & Yangming Lin

Nano-Micro Lett. 16, 125 (2024). <https://doi.org/10.1007/s40820-023-01262-8>

1. **Covalently Bonded Ni Sites in Black Phosphorene with Electron Redistribution for Efficient Metal-Lightweighted Water Electrolysis (Article)**

Wenfang Zhai, Ya Chen, Yaoda Liu, Yuanyuan Ma, Paranthaman Vijayakumar, Yuanbin Qin, Yongquan Qu & Zhengfei Dai

Nano-Micro Lett. 16, 115 (2024). <https://doi.org/10.1007/s40820-024-01331-6>

1. **Ultra-Efficient and Cost-Effective Platinum Nanomembrane Electrocatalyst for Sustainable Hydrogen Production (Article)**

Xiang Gao, Shicheng Dai, Yun Teng, Qing Wang, Zhibo Zhang, Ziyin Yang, Minhyuk Park, Hang Wang, Zhe Jia, Yunjiang Wang & Yong Yang

Nano-Micro Lett. 16, 108 (2024). <https://doi.org/10.1007/s40820-024-01324-5>

1. **Novel Perovskite Oxide Hybrid Nanofibers Embedded with Nanocatalysts for Highly Efficient and Durable Electrodes in Direct CO2 Electrolysis (Article)**

Akromjon Akhmadjonov, Kyung Taek Bae & Kang Taek Lee

Nano-Micro Lett. 16, 93 (2024). <https://doi.org/10.1007/s40820-023-01298-w>

1. **Strain-Induced Surface Interface Dual Polarization Constructs PML-Cu/Bi12O17Br2 High-Density Active Sites for CO2 Photoreduction (Article)**

Yi Zhang, Fangyu Guo, Jun Di, Keke Wang, Molly Meng-Jung Li, Jiayu Dai, Yuanbin She, Jiexiang Xia & Huaming Li

Nano-Micro Lett. 16, 90 (2024). <https://doi.org/10.1007/s40820-023-01309-w>

1. **Enhancing Green Ammonia Electrosynthesis Through Tuning Sn Vacancies in Sn-Based MXene/MAX Hybrids (Article)**

Xinyu Dai, Zhen-Yi Du, Ying Sun, Ping Chen, Xiaoguang Duan, Junjun Zhang, Hui Li, Yang Fu, Baohua Jia, Lei Zhang, Wenhui Fang, Jieshan Qiu & Tianyi Ma

Nano-Micro Lett. 16, 89 (2024). <https://doi.org/10.1007/s40820-023-01303-2>

1. **Interfacial Electronic Modulation of Dual-Monodispersed Pt–Ni3S2 as Efficacious Bi-Functional Electrocatalysts for Concurrent H2 Evolution and Methanol Selective Oxidation (Article)**

Qianqian Zhao, Bin Zhao, Xin Long, Renfei Feng, Mohsen Shakouri, Alisa Paterson, Qunfeng Xiao, Yu Zhang, Xian-Zhu Fu & Jing-Li Luo

Nano-Micro Lett. 16, 80 (2024). <https://doi.org/10.1007/s40820-023-01282-4>

1. **Cu-Based Materials for Enhanced C2+ Product Selectivity in Photo-/Electro-Catalytic CO2 Reduction: Challenges and Prospects (Review)**

Baker Rhimi, Min Zhou, Zaoxue Yan, Xiaoyan Cai & Zhifeng Jiang

Nano-Micro Lett. 16, 64 (2024). <https://doi.org/10.1007/s40820-023-01276-2>

1. **Precisely Control Relationship between Sulfur Vacancy and H Absorption for Boosting Hydrogen Evolution Reaction (Article)**

Jing Jin, Xinyao Wang, Yang Hu, Zhuang Zhang, Hongbo Liu, Jie Yin & Pinxian Xi

Nano-Micro Lett. 16, 63 (2024). <https://doi.org/10.1007/s40820-023-01291-3>

1. **Enhanced Redox Electrocatalysis in High-Entropy Perovskite Fluorides by Tailoring d–p Hybridization (Article)**

Xudong Li, Zhuomin Qiang, Guokang Han, Shuyun Guan, Yang Zhao, Shuaifeng Lou & Yongming Zhu

Nano-Micro Lett. 16, 55 (2024). <https://doi.org/10.1007/s40820-023-01275-3>

1. **Exploring the Cation Regulation Mechanism for Interfacial Water Involved in the Hydrogen Evolution Reaction by In Situ Raman Spectroscopy (Article)**

Xueqiu You, Dongao Zhang, Xia-Guang Zhang, Xiangyu Li, Jing-Hua Tian, Yao-Hui Wang & Jian-Feng Li

Nano-Micro Lett. 16, 53 (2024). <https://doi.org/10.1007/s40820-023-01285-1>

1. **Strongly Coupled Ag/Sn–SnO2 Nanosheets Toward CO2 Electroreduction to Pure HCOOH Solutions at Ampere-Level Current (Article)**

Min Zhang, Aihui Cao, Yucui Xiang, Chaogang Ban, Guang Han, Junjie Ding, Li-Yong Gan & Xiaoyuan Zhou

Nano-Micro Lett. 16, 50 (2024). <https://doi.org/10.1007/s40820-023-01264-6>

1. **Internal Polarization Field Induced Hydroxyl Spillover Effect for Industrial Water Splitting Electrolyzers (Article)**

Jingyi Xie, Fuli Wang, Yanan Zhou, Yiwen Dong, Yongming Chai & Bin Dong

Nano-Micro Lett. 16, 39 (2024). <https://doi.org/10.1007/s40820-023-01253-9>

1. **Deformable Catalytic Material Derived from Mechanical Flexibility for Hydrogen Evolution Reaction (Review)**

Fengshun Wang, Lingbin Xie, Ning Sun, Ting Zhi, Mengyang Zhang, Yang Liu, Zhongzhong Luo, Lanhua Yi, Qiang Zhao & Longlu Wang

Nano-Micro Lett. 16, 32 (2024). <https://doi.org/10.1007/s40820-023-01251-x>

1. **Oxygen-Coordinated Single Mn Sites for Efficient Electrocatalytic Nitrate Reduction to Ammonia (Article)**

Shengbo Zhang, Yuankang Zha, Yixing Ye, Ke Li, Yue Lin, Lirong Zheng, Guozhong Wang, Yunxia Zhang, Huajie Yin, Tongfei Shi & Haimin Zhang

Nano-Micro Lett. 16, 9 (2024). <https://doi.org/10.1007/s40820-023-01217-z>

1. **Atomic Dispersed Hetero-Pairs for Enhanced Electrocatalytic CO2 Reduction (Article)**

Zhaoyong Jin, Meiqi Yang, Yilong Dong, Xingcheng Ma, Ying Wang, Jiandong Wu, Jinchang Fan, Dewen Wang, Rongshen Xi, Xiao Zhao, Tianyi Xu, Jingxiang Zhao, Lei Zhang, David J. Singh, Weitao Zheng & Xiaoqiang Cui

Nano-Micro Lett. 16, 4 (2024). <https://doi.org/10.1007/s40820-023-01214-2>

1. **Engineering Fe-N4 Electronic Structure with Adjacent Co-N2C2 and Co Nanoclusters on Carbon Nanotubes for Efficient Oxygen Electrocatalysis (Article)**

Mingjie Wu, Xiaohua Yang, Xun Cui, Ning Chen, Lei Du, Mohamed Cherif, Fu-Kuo Chiang, Yuren Wen, Amir Hassanpour, François Vidal, Sasha Omanovic, Yingkui Yang, Shuhui Sun & Gaixia Zhang

Nano-Micro Lett. 15, 232 (2023) <https://doi.org/10.1007/s40820-023-01195-2>

1. **Atomic Cu Sites Engineering Enables Efficient CO2 Electroreduction to Methane with High CH4/C2H4 Ratio (Article)**

Minhan Li, Fangzhou Zhang, Min Kuang, Yuanyuan Ma, Ting Liao, Ziqi Sun, Wei Luo, Wan Jiang & Jianping Yang

Nano-Micro Lett. 15, 238 (2023). <https://doi.org/10.1007/s40820-023-01188-1>

1. **Advances on Axial Coordination Design of Single-Atom Catalysts for Energy Electrocatalysis: A Review (Review)**

Linjie Zhang, Na Jin, Yibing Yang, Xiao-Yong Miao, Hua Wang, Jun Luo & Lili Han

Nano-Micro Lett. 15, 228 (2023). <https://doi.org/10.1007/s40820-023-01196-1>

1. **Machine Learning-Assisted Low-Dimensional Electrocatalysts Design for Hydrogen Evolution Reaction (Review)**

Jin Li, Naiteng Wu, Jian Zhang, Hong-Hui Wu, Kunming Pan, Yingxue Wang, Guilong Liu, Xianming Liu, Zhenpeng Yao & Qiaobao Zhang

Nano-Micro Lett. 15, 227 (2023). <https://doi.org/10.1007/s40820-023-01192-5>

1. **Graphene Quantum Dot-Mediated Atom-Layer Semiconductor Electrocatalyst for Hydrogen Evolution (Article)**

Bingjie Hu, Kai Huang, Bijun Tang, Zhendong Lei, Zeming Wang, Huazhang Guo, Cheng Lian, Zheng Liu & Liang Wang Bingjie Hu, Kai Huang, Bijun Tang, Zhendong Lei, Zeming Wang, Huazhang Guo, Cheng Lian, Zheng Liu & Liang Wang

Nano-Micro Lett. 15, 217 (2023). <https://doi.org/10.1007/s40820-023-01182-7>

1. **Nanoengineering Metal–Organic Frameworks and Derivatives for Electrosynthesis of Ammonia (Review)**

Daming Feng, Lixue Zhou, Timothy J. White, Anthony K. Cheetham, Tianyi Ma & Fengxia Wei

Nano-Micro Lett. 15, 203 (2023). <https://doi.org/10.1007/s40820-023-01169-4>

1. **Highly Selective Electrocatalytic CuEDTA Reduction by MoS2 Nanosheets for Efficient Pollutant Removal and Simultaneous Electric Power Output (Article)**

Hehe Qin, Xinru Liu, Xiangyun Liu, Hongying Zhao & Shun Mao

Nano-Micro Lett. 15, 193 (2023). <https://doi.org/10.1007/s40820-023-01166-7>

1. **Optimized Electronic Modification of S-Doped CuO Induced by Oxidative Reconstruction for Coupling Glycerol Electrooxidation with Hydrogen Evolution (Article)**

Ruo-Yao Fan, Xue-Jun Zhai, Wei-Zhen Qiao, Yu-Sheng Zhang, Ning Yu, Na Xu, Qian-Xi Lv, Yong-Ming Chai & Bin Dong

Nano-Micro Lett. 15, 190 (2023). <https://doi.org/10.1007/s40820-023-01159-6>

1. **Immobilization of Oxyanions on the Reconstructed Heterostructure Evolved from a Bimetallic Oxysulfide for the Promotion of Oxygen Evolution Reaction (Article)**

Kai Yu, Hongyuan Yang, Hao Zhang, Hui Huang, Zhaowu Wang, Zhenhui Kang, Yang Liu, Prashanth W. Menezes & Ziliang Chen

Nano-Micro Lett. 15, 186 (2023). <https://doi.org/10.1007/s40820-023-01164-9>

1. **Designing Oxide Catalysts for Oxygen Electrocatalysis: Insights from Mechanism to Application (Review)**

Ning Han, Wei Zhang, Wei Guo, Hui Pan, Bo Jiang, Lingbao Xing, Hao Tian, Guoxiu Wang, Xuan Zhang & Jan Fransaer

Nano-Micro Lett. 15, 185 (2023). <https://doi.org/10.1007/s40820-023-01152-z>

1. **Electrochemical Carbon Dioxide Reduction to Ethylene: From Mechanistic Understanding to Catalyst Surface Engineering (Review)**

Junpeng Qu, Xianjun Cao, Li Gao, Jiayi Li, Lu Li, Yuhan Xie, Yufei Zhao, Jinqiang Zhang, Minghong Wu & Hao Liu

Nano-Micro Lett. 15, 178 (2023). <https://doi.org/10.1007/s40820-023-01146-x>

1. **Tuning Active Metal Atomic Spacing by Filling of Light Atoms and Resulting Reversed Hydrogen Adsorption-Distance Relationship for Efficient Catalysis (Article)**

Ding Chen, Ruihu Lu, Ruohan Yu, Hongyu Zhao, Dulan Wu, Youtao Yao, Kesong Yu, Jiawei Zhu, Pengxia Ji, Zonghua Pu, Zongkui Kou, Jun Yu, Jinsong Wu & Shichun Mu

Nano-Micro Lett. 15, 168 (2023). <https://doi.org/10.1007/s40820-023-01142-1>

1. **Synergistic Effect of Dual-Doped Carbon on Mo2C Nanocrystals Facilitates Alkaline Hydrogen Evolution (Article)**

Min Zhou, Xiaoli Jiang, Weijie Kong, Hangfei Li, Fei Lu, Xin Zhou & Yagang Zhang

Nano-Micro Lett. 15, 166 (2023). <https://doi.org/10.1007/s40820-023-01135-0>

1. **Efficient CO2 Reduction to Formate on CsPbI3 Nanocrystals Wrapped with Reduced Graphene Oxide (Article)**

Minh Tam Hoang, Chen Han, Zhipeng Ma, Xin Mao, Yang Yang, Sepideh Sadat Madani, Paul Shaw, Yongchao Yang, Lingyi Peng, Cui Ying Toe, Jian Pan, Rose Amal, Aijun Du, Tuquabo Tesfamichael, Zhaojun Han & Hongxia Wang

Nano-Micro Lett. 15, 161 (2023). <https://doi.org/10.1007/s40820-023-01132-3>

1. **Quasi-Three-Dimensional Cyclotriphosphazene-Based Covalent Organic Framework Nanosheet for Efficient Oxygen Reduction (Article)**

Jianhong Chang, Cuiyan Li, Xiaoxia Wang, Daohao Li, Jie Zhang, Xiaoming Yu, Hui Li, Xiangdong Yao, Valentin Valtchev, Shilun Qiu & Qianrong Fang

Nano-Micro Lett. 15, 159 (2023). <https://doi.org/10.1007/s40820-023-01111-8>

1. **Engineering Spin States of Isolated Copper Species in a Metal–Organic Framework Improves Urea Electrosynthesis (Article)**

Yuhang Gao, Jingnan Wang, Yijun Yang, Jian Wang, Chuang Zhang, Xi Wang & Jiannian Yao

Nano-Micro Lett. 15, 158 (2023). <https://doi.org/10.1007/s40820-023-01127-0>

1. **Fundamental Perspectives on the Electrochemical Water Applications of Metal–Organic Frameworks (Review)**

Xiang He

Nano-Micro Lett. 15, 148 (2023). <https://doi.org/10.1007/s40820-023-01124-3>

1. **Electrochemically Grown Ultrathin Platinum Nanosheet Electrodes with Ultralow Loadings for Energy-Saving and Industrial-Level Hydrogen Evolution (Article)**

Lei Ding, Zhiqiang Xie, Shule Yu, Weitian Wang, Alexander Y. Terekhov, Brian K. Canfield, Christopher B. Capuano, Alex Keane, Kathy Ayers, David A. Cullen & Feng-Yuan Zhang

Nano-Micro Lett. 15, 144 (2023). <https://doi.org/10.1007/s40820-023-01117-2>

1. **PtNi-W/C with Atomically Dispersed Tungsten Sites Toward Boosted ORR in Proton Exchange Membrane Fuel Cell Devices (Article)**

Huawei Wang, Jialong Gao, Changli Chen, Wei Zhao, Zihou Zhang, Dong Li, Ying Chen, Chenyue Wang, Cheng Zhu, Xiaoxing Ke, Jiajing Pei, Juncai Dong, Qi Chen, Haibo Jin, Maorong Chai & Yujing Li

Nano-Micro Lett. 15, 143 (2023). <https://doi.org/10.1007/s40820-023-01102-9>

1. **Strategies for Sustainable Production of Hydrogen Peroxide via Oxygen Reduction Reaction: From Catalyst Design to Device Setup (Review)**

Yuhui Tian, Daijie Deng, Li Xu, Meng Li, Hao Chen, Zhenzhen Wu & Shanqing Zhang

Nano-Micro Lett. 15, 122 (2023). [https://doi.org/10.1007/s40820-023-01067-9](%20https:/doi.org/10.1007/s40820-023-01067-9)

1. **Atomically Dispersed Dual-Metal Sites Showing Unique Reactivity and Dynamism for Electrocatalysis (Article)**

Jun-Xi Wu, Wen-Xing Chen, Chun-Ting He, Kai Zheng, Lin-Ling Zhuo, Zhen-Hua Zhao & Jie-Peng Zhang

Nano-Micro Lett. 15, 120 (2023). <https://doi.org/10.1007/s40820-023-01080-y>

1. **Applications of Metal–Organic Frameworks and Their Derivatives in Electrochemical CO2 Reduction (Review)**

Chengbo Li, Yuan Ji, Youpeng Wang, Chunxiao Liu, Zhaoyang Chen, Jialin Tang, Yawei Hong, Xu Li, Tingting Zheng, Qiu Jiang & Chuan Xia

Nano-Micro Lett. 15, 113 (2023). <https://doi.org/10.1007/s40820-023-01092-8>

1. **Identification of Dynamic Active Sites Among Cu Species Derived from MOFs@CuPc for Electrocatalytic Nitrate Reduction Reaction to Ammonia (Article)**

Xue-Yang Ji, Ke Sun, Zhi-Kun Liu, Xinghui Liu, Weikang Dong, Xintao Zuo, Ruiwen Shao & Jun Tao

Nano-Micro Lett. 15, 110 (2023). <https://doi.org/10.1007/s40820-023-01091-9>

1. **Recent Advances of Electrocatalyst and Cell Design for Hydrogen Peroxide Production (Review)**

Xiao Huang, Min Song, Jingjing Zhang, Tao Shen, Guanyu Luo & Deli Wang

Nano-Micro Lett. 15, 86 (2023). [https://doi.org/10.1007/s40820-023-01044-2](%20https:/doi.org/10.1007/s40820-023-01044-2)

1. **Shape-Controlled Synthesis of Platinum-Based Nanocrystals and Their Electrocatalytic Applications in Fuel Cells (Review)**

Can Li, N. Clament Sagaya Selvam & Jiye Fang

Nano-Micro Lett. 15, 83 (2023). [https://doi.org/10.1007/s40820-023-01060-2](%20https:/doi.org/10.1007/s40820-023-01060-2)

1. **Recent Advances of Transition Metal Basic Salts for Electrocatalytic Oxygen Evolution Reaction and Overall Water Electrolysis (Review)**

Bingrong Guo, Yani Ding, Haohao Huo, Xinxin Wen, Xiaoqian Ren, Ping Xu & Siwei Li

Nano-Micro Lett. 15, 57 (2023). [https://doi.org/10.1007/s40820-023-01038-0](%20https:/doi.org/10.1007/s40820-023-01038-0)

1. **Facet Engineering of Advanced Electrocatalysts Toward Hydrogen/Oxygen Evolution Reactions (Review)**

Changshui Wang, Qian Zhang, Bing Yan, Bo You, Jiaojiao Zheng, Li Feng, Chunmei Zhang, Shaohua Jiang, Wei Chen & Shuijian He

Nano-Micro Lett. 15, 52 (2023). [https://doi.org/10.1007/s40820-023-01024-6](%20https:/doi.org/10.1007/s40820-023-01024-6)

1. **A Review of In-Situ Techniques for Probing Active Sites and Mechanisms of Electrocatalytic Oxygen Reduction Reactions (Review)**

Jinyu Zhao, Jie Lian, Zhenxin Zhao, Xiaomin Wang & Jiujun Zhan

Nano-Micro Lett. 15, 19 (2023). <https://doi.org/10.1007/s40820-022-00984-5>

1. **Waste-Derived Catalysts for Water Electrolysis: Circular Economy-Driven Sustainable Green Hydrogen Energy (Review)**

Zhijie Chen, Sining Yun, Lan Wu, Jiaqi Zhang, Xingdong Shi, Wei Wei, Yiwen Liu, Renji Zheng, Ning Han & Bing-Jie Ni

Nano-Micro Lett. 15, 4 (2023). <https://doi.org/10.1007/s40820-022-00974-7>

1. **High-Entropy Perovskite Oxide: A New Opportunity for Developing Highly Active and Durable Air Electrode for Reversible Protonic Ceramic Electrochemical Cells (Article)**

Zuoqing Liu, Zhengjie Tang, Yufei Song, Guangming Yang, Wanru Qian, Meiting Yang, Yinlong Zhu, Ran Ran, Wei Wang, Wei Zhou & Zongping Shao

Nano-Micro Lett. 14, 217 (2022). <https://doi.org/10.1007/s40820-022-00967-6>

1. **Oxygen Functionalization-Induced Charging Effect on Boron Active Sites for High-Yield Electrocatalytic NH3 Production (Article)**

Ashmita Biswas, Samadhan Kapse, Ranjit Thapa & Ramendra Sundar Dey

Nano-Micro Lett. 14, 214 (2022). <https://doi.org/10.1007/s40820-022-00966-7>

1. **A Pair-Electrosynthesis for Formate at Ultra-Low Voltage Via Coupling of CO2 Reduction and Formaldehyde Oxidation (Article)**

Mengyu Li, Tehua Wang, Weixing Zhao, Shuangyin Wang & Yuqin Zou

Nano-Micro Lett. 14, 211 (2022). [https://doi.org/10.1007/s40820-022-00953-y](%20https:/doi.org/10.1007/s40820-022-00953-y)

1. **Coordination Effect-Promoted Durable Ni(OH)2 for Energy-Saving Hydrogen Evolution from Water/Methanol Co-Electrocatalysis (Article)**

Guodong Fu, Xiaomin Kang, Yan Zhang, Xiaoqiang Yang, Lei Wang, Xian-Zhu Fu, Jiujun Zhang, Jing-Li Luo & Jianwen Liu

Nano-Micro Lett. 14, 200 (2022). <https://doi.org/10.1007/s40820-022-00940-3>

1. **Inner Co Synergizing Outer Ru Supported on Carbon Nanotubes for Efficient pH-Universal Hydrogen Evolution Catalysis (Article)**

Jian Chen, Yuan Ha, Ruirui Wang, Yanxia Liu, Hongbin Xu, Bin Shang, Renbing Wu & Hongge Pan

Nano-Micro Lett. 14, 186 (2022). <https://doi.org/10.1007/s40820-022-00933-2>

1. **MOF-Transformed In2O3-x@C Nanocorn Electrocatalyst for Efficient CO2 Reduction to HCOOH (Article)**

Chen Qiu, Kun Qian, Jun Yu, Mingzi Sun, Shoufu Cao, Jinqiang Gao, Rongxing Yu, Lingzhe Fang, Youwei Yao, Xiaoqing Lu, Tao Li, Bolong Huang & Shihe Yang

Nano-Micro Lett. 14, 167 (2022). <https://doi.org/10.1007/s40820-022-00913-6>

1. **Electric-Field-Treated Ni/Co3O4 Film as High-Performance Bifunctional Electrocatalysts for Efficient Overall Water Splitting (Article)**

Junming Li, Jun Li, Jun Ren, Hong Hong, Dongxue Liu, Lizhe Liu & Dunhui Wang

Nano-Micro Lett. 14, 148 (2022). <https://doi.org/10.1007/s40820-022-00889-3>

1. **Hetero-Interfaces on Cu Electrode for Enhanced Electrochemical Conversion of CO2 to Multi-Carbon Products (Article)**

Xiaotong Li, Jianghao Wang, Xiangzhou Lv, Yue Yang, Yifei Xu, Qian Liu & Hao Bin Wu

Nano-Micro Lett. 14, 134 (2022). <https://doi.org/10.1007/s40820-022-00879-5>

1. **Operando Converting BiOCl into Bi2O2(CO3)xCly for Efficient Electrocatalytic Reduction of Carbon Dioxide to Formate (Article)**

Huai Qin Fu, Junxian Liu, Nicholas M. Bedford, Yun Wang, Joshua Wright, Peng Fei Liu, Chun Fang Wen, Liang Wang, Huajie Yin, Dongchen Qi, Porun Liu, Hua Gui Yang & Huijun Zhao

Nano-Micro Lett. 14, 121 (2022). <https://doi.org/10.1007/s40820-022-00862-0>

1. **Interface Engineering of NixSy@MnOxHy Nanorods to Efficiently Enhance Overall-Water-Splitting Activity and Stability (Article)**

Pan Wang, Yuanzhi Luo, Gaixia Zhang, Zhangsen Chen, Hariprasad Ranganathan, Shuhui Sun & Zhicong Shi

Nano-Micro Lett. 14, 120 (2022). <https://doi.org/10.1007/s40820-022-00860-2>

1. **Oxygen Evolution Reaction in Energy Conversion and Storage: Design Strategies Under and Beyond the Energy Scaling Relationship (Review)**

Jiangtian Li

Nano-Micro Lett. 14, 112 (2022). <https://doi.org/10.1007/s40820-022-00857-x>

1. **Conversion of Catalytically Inert 2D Bismuth Oxide Nanosheets for Effective Electrochemical Hydrogen Evolution Reaction Catalysis via Oxygen Vacancy Concentration Modulation (Article)**

Ziyang Wu, Ting Liao, Sen Wang, Janith Adikaram Mudiyanselage, Aaron S. Micallef, Wei Li, Anthony P. O’Mullane, Jianping Yang, Wei Luo, Kostya Ostrikov, Yuantong Gu & Ziqi Sun

Nano-Micro Lett. 14, 90 (2022). <https://doi.org/10.1007/s40820-022-00832-6>

1. **Multilayer Strategy for Photoelectrochemical Hydrogen Generation: New Electrode Architecture that Alleviates Multiple Bottlenecks (Article)**

Selvaraj Seenivasan, Hee Moon & Do-Heyoung Kim

Nano-Micro Lett. 14, 78 (2022). [https://doi.org/10.1007/s40820-022-00822-8](%20https:/doi.org/10.1007/s40820-022-00822-8)

1. **Isotype Heterojunction-Boosted CO2 Photoreduction to CO (Article)**

Chaogang Ban, Youyu Duan, Yang Wang, Jiangping Ma, Kaiwen Wang, Jiazhi Meng, Xue Liu, Cong Wang, Xiaodong Han, Guozhong Cao, Liyong Gan & Xiaoyuan Zhou

Nano-Micro Lett. 14, 74 (2022). <https://doi.org/10.1007/s40820-022-00821-9>

1. **Monolayer Graphitic Carbon Nitride as Metal-Free Catalyst with Enhanced Performance in Photo- and Electro-Catalysis (Article)**

Huiyan Piao, Goeun Choi, Xiaoyan Jin, Seong-Ju Hwang, Young Jae Song, Sung-Pyo Cho & Jin-Ho Choy

Nano-Micro Lett. 14, 55 (2022). <https://doi.org/10.1007/s40820-022-00794-9>

1. **Shining Light on Anion-Mixed Nanocatalysts for Efficient Water Electrolysis: Fundamentals, Progress, and Perspectives (Review)**

Yaoda Liu, Paranthaman Vijayakumar, Qianyi Liu, Thangavel Sakthivel, Fuyi Chen & Zhengfei Dai

Nano-Micro Lett. 14, 43 (2022). <https://doi.org/10.1007/s40820-021-00785-2>

1. **High-Index Faceted Nanocrystals as Highly Efficient Bifunctional Electrocatalysts for High-Performance Lithium–Sulfur Batteries (Article)**

Bo Jiang, Da Tian, Yue Qiu, Xueqin Song, Yu Zhang, Xun Sun, Huihuang Huang, Chenghao Zhao, Zhikun Guo, Lishuang Fan & Naiqing Zhang

Nano-Micro Lett. 14, 40 (2022). <https://doi.org/10.1007/s40820-021-00769-2>

1. **Regulating the Electron Localization of Metallic Bismuth for Boosting CO2 Electroreduction (Article)**

Dan Wu, Renfei Feng, Chenyu Xu, Peng-Fei Sui, Jiujun Zhang, Xian-Zhu Fu & Jing-Li Luo

Nano-Micro Lett. 14, 38 (2022). <https://doi.org/10.1007/s40820-021-00772-7>

1. **Atomically Dispersed Transition Metal-Nitrogen-Carbon Bifunctional Oxygen Electrocatalysts for Zinc-Air Batteries: Recent Advances and Future Perspectives (Review)**

Fang Dong, Mingjie Wu, Zhangsen Chen, Xianhu Liu, Gaixia Zhang, Jinli Qiao & Shuhui Sun

Nano-Micro Lett. 14, 36 (2022). <https://doi.org/10.1007/s40820-021-00768-3>

1. **Atomically Dispersed Fe-Co Bimetallic Catalysts for the Promoted Electroreduction of Carbon Dioxide (Article)**

Zhangsen Chen, Gaixia Zhang, Yuren Wen, Ning Chen, Weifeng Chen, Tom Regier, James Dynes, Yi Zheng & Shuhui Sun

Nano-Micro Lett. 14, 25 (2022). <https://doi.org/10.1007/s40820-021-00746-9>

1. **Three-Phase Heterojunction NiMo-Based Nano-Needle for Water Splitting at Industrial Alkaline Condition (Article)**

Guangfu Qian, Jinli Chen, Tianqi Yu, Jiacheng Liu, Lin Luo & Shibin Yin

Nano-Micro Lett. 14, 20 (2022). <https://doi.org/10.1007/s40820-021-00744-x>

1. **Electrostatic Field Enhanced Photocatalytic CO2 Conversion on BiVO4 Nanowires (Article)**

Shuai Yue, Lu Chen, Manke Zhang, Zhe Liu, Tao Chen, Mingzheng Xie, Zhen Cao & Weihua Han

Nano-Micro Lett. 14, 15 (2022). [https://doi.org/10.1007/s40820-021-00749-6](%20https:/doi.org/10.1007/s40820-021-00749-6)