

Selected publications (*Corresponding Author)

1. Di Liu, Lulu Qiao, Shuyang Peng, Haoyun Bai, Chunfa Liu, Weng Fai Ip, Kin Ho Lo, Hongchao Liu, Kar Wei Ng, Shuangpeng Wang*, Xiaozhan Yang, and **Hui Pan***, Recent advances in electrocatalysts for efficient nitrate reduction to ammonia. *Adv. Func. Mater.* (2023).
2. Pengfei Zhou, Songbo Chen, Haoyun Bai, Chunfa Liu, Jinxian Feng, Di Liu, Lulu Qiao, Shuangpeng Wang*, and **Hui Pan***, Facile formation of Zn-incorporated NiFe layered double hydroxide as highly-efficient oxygen evolution catalyst. *J. Colloid Inter. Sci.* **647**, 65-72 (2023).
3. Jinxian Feng, Junyan Li, Lulu Qiao, Dong Liu, Pengfei Zhou, Jun Ni and **Hui Pan***, Reconstructed Anti-Poisoning Surface for Enhanced Electrochemical CO₂ Reduction on Cu-Incorporated ZnO. *Appl. Catal. B* **330**, 122665 (2023).
4. Mingpeng Chen, Di Liu, Lulu Qiao, Pengfei Zhou, Jinxian Feng, Kar Wei Ng, Qingju Liu*, Shuangpeng Wang* and **Hui Pan***, In-situ/operando Raman techniques for in-depth understanding on electrocatalysis. *Chem. Eng. J.* **461**, 141939 (2023).
5. Di Liu, Lulu Qiao, Yuyun Chen, Pengfei Zhou, Jinxian Feng, Chon Chio Leong, Kar Wei Ng, Shengjie Peng, Shuangpeng Wang*, Weng Fai Ip, and **Hui Pan***, Electrocatalytic Reduction of Nitrate to Ammonia on Low-Cost Manganese-incorporated Co₃O₄ nanotubes. *Appl. Catal. B* **324**, 122293 (2023).
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7. Jinxian Feng, Xiongwei Zhong, Mingpeng Chen, Pengfei Zhou, Lulu Qiao, Haoyun Bai, Dong Liu, Di Liu, Yu-Yun Chen, Weng Fai Ip, Shi Chen, Jun Ni, Detao Liu, and **Hui Pan***, Iron-incorporated Defective Graphite by in-situ Electrochemical Oxidization for Oxygen Evolution Reaction. *J. Power Sources* **561**, 232700 (2023).
8. Pengfei Zhou, Haoyun Bai, Jinxian Feng, Di Liu, Lulu Qiao, Chunfa Liu, Shuang-Peng Wang*, and **Hui Pan***, Recent Progress on bulk Fe-based alloy for industrial alkaline water electrolysis. *J. Mater. Chem. A* **11**, 1551 - 1574 (2023).
9. Haoyun Bai, Jinxian Feng, Di Liu, Pengfei Zhou, Rucheng Wu, Chi Tat Kwok, Weng Fai Ip, Wenlin Feng, Xulei Sui, Hongchao Liu*, and **Hui Pan***, Advances in Spin Catalysts for Oxygen Evolution and Reduction Reactions, *Small* **19**, 2205638 (2023). (Hot Topic: Magnetic Materials)
10. Lulu Qiao, Anquan Zhu, Di Liu, Jinxian Feng, Yuyun Chen, Mingpeng Chen, Pengfei Zhou, Lihong Yin, Rucheng Wu, Kar Wei Ng*, and **Hui Pan***, Crystalline phosphides/amorphous oxides composite for energy-saving hydrogen production assisted by efficient urea oxidation reaction. *Chem. Eng. J* **454**, 140380 (2023).
11. Di Liu, Jia Zhao, Youchao Kong, Haoqiang Ai, Haoyun Bai, Chon Chio Leong, Kin Ho Lo, Shuangpeng Wang*, Weng Fai Ip, Sen Lin, and **Hui Pan***, Comprehensive Mechanism for CO Electroreduction on Dual-Atom-Catalyst-Anchored N-Doped Graphene. *ChemPhysChem* **24**, e202200937 (2023).
12. Pengfei Zhou, Po Kee Wong, Pengda Niu, Mingpeng Chen, Chi Tat Kwok, Yuxin Tang*, Ruidi Li*, Shuangpeng Wang*, and **Hui Pan***, Anodized AlCoCrFeNi high-entropy alloy for alkaline water electrolysis with ultra-high performance. *Sci. China Mater.* **66**, 1033-1041 (2023).

13. Haoyun Bai, Di Liu, Pengfei Zhou, Jinxian Feng, Xulei Sui, Yunhao Lu, Hongchao Liu* and **Hui Pan***, Spin evolution and flip in the oxygen reduction reaction: a theoretical study of Cu(Ni)XP₂S₆ (X = In, Bi and Cr). *J. Mater. Chem. A* **10**, 25262-25271 (2022).
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27. Tianwei He, Alain R. Puente Santiago, Youchao Kong, Md Ariful Ahsan, Rafael Luque,* Aijun Du,* and **Hui Pan***, Atomically Dispersed Heteronuclear Dual-Atom Catalysts: A New Rising Star in Atomic Catalysis. *Small*, **2106091** (2022).
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