



所属学院 化工学院

学科领域 化学工程与技术

邮箱 dfniu@ecust.edu.cn

个人简介

教育背景:

2000.9-2004.6 江苏师范大学化学系, 化学专业, 学士学位

2005.9-2010.6 华东师范大学化学系, 物理化学专业, 博士学位

2008.9-2009.8 美国 Washington University in St. Louis 化学系, 博士联合培养

工作经历:

2017.11-2018.11 美国 University of California, Irvine 化学系, 访问学者

2010.9-2016.8 华东理工大学化工学院, 讲师

2016.9- 至今 华东理工大学化工学院, 副教授

研究方向

能源储存与转化过程电催化剂的设计及其性能研究, 具体包括 CO₂ 电还原反应 (CO₂RR), 锂硫电池隔膜改性等; 电化学法合成高附加值化学品

研究成果及主要发表文章

1. Zhongqiao Ma, Cheng Lian, Dongfang Niu*, Lei Shi, Shuozhen Hu, Xinsheng Zhang, Honglai Liu, Enhancing CO₂ electroreduction with Au/pyridine/carbon nanotubes hybrid structures. ChemSusChem, 2019, 12, 1724-1731.
2. Jie Xu, Shiming Bi, Weiqiang Tang, Qi Kang, Dongfang Niu*, Shuozhen Hu, Shuangliang Zhao, Limin Wang, Zhong Xin, Xinsheng Zhang*, Duplex trapping and charge transfer with polysulfides by a diketopyrrolopyrrole-based organic framework for high-performance lithium-sulfur batteries. J. Mater. Chem. A, 2019, 7, 18100-18108.
3. Yuning Zhang, Lin Liu, Lei Shi, Tingting Yang, Dongfang Niu*, Shuozhen Hu, Xinsheng Zhang, Enhancing CO₂ electroreduction on nanoporous silver electrode in the presence of halides. Electrochim. Acta, 2019, 313, 561-569.
4. Jie Xu, Biao Chen, Jing Lv, Dongdong Chang, Dongfang Niu*, Shuozhen Hu, Xinsheng Zhang*, Zhong Xin, Limin Wang*, Aryl modification of diketopyrrolopyrrole-based quaternary ammonium salts and their applications in copper electrodeposition. Dyes Pigments, 2019, 170, 107559.
5. Lei Shi, Yuning Zhang, Xiaofei Han, Dongfang Niu*, Jinlong Sun, Jenny Y. Yang, Shuozhen Hu, Xinsheng Zhang*, SDS-modified nanoporous silver as an efficient electrocatalyst for selectively converting CO₂ to CO in aqueous solution. Chin. J. Chem., 2019, 37, 337-341.
6. Dongfang Niu*, Haiyang Wang, Huicheng Li, Xinsheng Zhang, The effect of the alkyl chain length of the tetraalkylammonium cation on CO₂ electroreduction in aprotic medium. Electrochem. Commun., 2015, 52, 58-62.
7. Dongfang Niu*, Haiyang Wang, Huicheng Li, Zhijuan Wu, Roles of ion pairing on electroreduction of carbon dioxide based on imidazolium-based salts. Electrochim. Acta, 2015, 158, 138-142.
8. Dongfang Niu, Huicheng Li, Xinsheng Zhang*, Improved synthesis of 3-methoxy-4-hydroxy mandelic acid by glyoxalic acid method. Tetrahedron, 2013, 69, 8174-8177.
9. Rensheng Zhong, Yuanhang Qin, Dongfang Niu*, Jingwei Tian, Xinsheng Zhang, Xingui Zhou, Shigang Sun, Weikang Yuan, Effect of carbon nanofiber surface functional groups on oxygen reduction in alkaline solution. J. Power Sources, 2013, 225, 192-199.
10. Rensheng Zhong, Yuanhang Qin, Dongfang Niu*, Xinsheng Zhang, Xingui Zhou, Shigang Sun, Weikang Yuan, Effect of carbon nanofiber surface groups on oxygen reduction reaction of supported Pt electrocatalyst. Electrochim. Acta, 2013, 89, 157-162.