



The diagram illustrates a three-step process for CO₂ reduction: Thermophysical deposition (Air, 60°C, 3h), Pyrolysis (Air, 550°C), and Electro-deposition (-0.75V vs SCE, 6h). The bar chart below shows the production rate of HCOO⁻ (mol h⁻¹ cm⁻²) and Faradaic efficiency (FE_{HCOO⁻} / %) as a function of KHCO₃ concentration (0.10, 0.25, 0.50, 0.75, 1.00 M). The production rate increases with concentration, peaking at 0.50 M, while the FE_{HCOO⁻} remains relatively stable around 80-90%.

- 教师简介**
- 环境工程系
 - 环境科学系**
 - 土木工程系
 - 建筑环境与能源应用工程系
 - 辅导员办公室
 - 实验中心
 - 党务及办公室

王永霞

发布时间: 2020-09-21



王永霞 副教授

环境科学系

联系方式: 021-67798739

电子邮箱: wyx912@dhu.edu.cn

办公地址: 松江区人民北路2999号, 东华大学, 松江校区四号学院楼3166室

个人简介

王永霞, 女, 1986年9月出生。2014年6月博士毕业于中国科学院上海硅酸盐研究所, 同年进入中科院上海微系统与信息技术研究所从事博士后研究工作, 2017年2月进入东华大学。目前主要研究方向为碳基非贵金属催化剂的可控制备及应用(燃料电池和CO₂还原等)。迄今为止, 以第一/通讯作者在Progress in Materials Science, Advanced Materials, Applied Catalysis B: Environmental, Journal of Materials Chemistry A, Carbon, Journal of Power Sources, ACS Sustainable Chemistry & Engineering, Applied Surface Science等SCI期刊上发表论文15篇以上。

教育经历

- 2011-09至-2014-06, 中国科学院上海硅酸盐研究所, 材料物理与化学, 博士
- 2008-09至2011-06, 中国科学院兰州化学物理研究所, 材料化学, 硕士
- 2005-09至2008-06, 聊城大学, 材料科学与工程学院, 材料化学, 学士

工作 (海外) 经历

- 2022-09至现在, 东华大学, 环境科学与工程学院, 环境科学系, 副教授
- 2019-05至2022-08, 东华大学, 环境科学与工程学院, 环境科学系, 讲师
- 2017-02-2019-04, 东华大学, 机械工程学院, 讲师
- 2014-07-2017-01, 中国科学院上海微系统与信息技术研究所, 材料科学与工程, 博士后

主讲课程

- 1、环境界面化学, 2、室内环境与人体健康

研究方向

代表性论著

1. **Yongxia Wang**, Xiangzhi Cui, Jinqiang, Zhang*, Jinli Qiao*, Haitao Huang, Jianlin Shi, Guoxiu Wang*. Advances of atomically dispersed catalysts from single-atom to clusters in energy storage and conversion applications. Prog. Mater. Sci. 2022, 128, 100964.
2. **Yongxia Wang**, Xiangzhi Cui, Luwei Peng, Lulu Li, Jinli Qiao*, Haitao Huang, Jianlin Shi*. Metal-nitrogen-carbon catalysts of specifically coordinated configurations toward typical electrochemical redox reactions. Adv. Mater. 2021, 33, 2100997.
3. **Yongxia Wang**, Jiayi Liu, Tuo Lu, Rui He, Nengneng Xu, Jinli Qiao*. Ultra-high voltage efficiency rechargeable zinc-air battery based on high-performance structurally regulated metal-rich nickel phosphides and carbon hybrids bifunctional electrocatalysts. Appl. Catal. B: Environ. 2023, 321, 122041.
4. **Yongxia Wang***, Nengneng Xu, Ruinan He, Luwei Peng, Dongqing Cai, Jinli Qiao*. Large-scale defect-engineering tailored tri-doped graphene as a metal-free bifunctional catalyst for superior electrocatalytic oxygen reaction in rechargeable Zn-air battery. Appl. Catal. B: Environ. 2021, 285, 119811.
5. **Yongxia Wang**, Mingjie Wu, Jun Li, Haitao Huang, Jinli Qiao*. In situ growth of CoP nanoparticles anchored on (N, P) co-doped porous carbon engineered by MOFs as advanced bifunctional oxygen catalyst for rechargeable Zn-air battery. J. Mater. Chem. A, 2020, 8, 19043.
6. **Yongxia Wang**, Yanxing Zhang, Haitao Huang, Jinli Qiao*. Advantageous configurative heteroatoms-doped carbon foams design and application for ultrahigh-powered Zn-air batteries. ACS Sustain. Chem. Eng. 2020, 8, 731-738.
7. Cong Liu, Fang Dong, **Yongxia Wang***, Jianning Guo, Yang Yang, Qiaojuan Gong, Jinli Qiao*. Mesoporous carbon based non-precious metal catalysts for oxygen reduction reaction: Effect of metal species and valence state. Int. J. Hydrogen Energ., 2020, 45, 29874-29882.
8. Cong Liu, Fang Dong, Mingjie Wu, **Yongxia Wang***, Nengneng Xu, Xu Wang, Jinli Qiao*, Penghui Shi, Haitao Huang. Dual-active-sites design of CoS_x anchored on nitrogen-doped carbon with tunable mesopore enables efficient Bi-Functional oxygen catalysis for ultra-stable zinc-air batteries. J. Power Sources, 2019, 438, 226953.
9. **Yongxia Wang***, Yanyan Du, Jinan Deng, Zhaopeng Wang. Friction reduction of water based lubricant with highly dispersed functional MoS₂ nanosheets. Colloid Surface A, 2019, 562, 321-328.
10. **Yongxia Wang**, Xiangzhi Cui, Yongsheng Li, Lisong Chen, Hangrong Chen, Lingxia Zhang, Jianlin Shi*. A co-pyrolysis route to synthesize nitrogen doped multiwall carbon nanotubes for oxygen reduction reaction. Carbon, 2014, 68, 232-239.
11. **Yongxia Wang**, Xiangzhi Cui, Yongsheng Li, Lisong Chen, Chenyang Wei, Fangming Cui, Heliang Yao, Jianlin Shi*, Yongsheng Li*. One-step replication and enhanced catalytic activity for cathodic oxygen reduction of the mesostructured Co₃O₄/carbon composites. Dalton Trans. 2014, 43, 4163-4168.
12. **Yongxia Wang**, Xiangzhi Cui, Yongsheng Li, Lisong Chen, Zhu Shu, Hangrong Chen, Jianli Shi*. High surface area mesoporous LaFe_xCo_{1-x}O₃ oxides: synthesis and electrocatalytic property for oxygen reduction. Dalton Trans. 2013, 42, 9448.
13. **Yongxia Wang**, Yinping Ye, Hongxuan Li, Li Ji, Jianmin Chen, Huidi Zhou. A magnetron sputtering technique to prepare a-C:H films: Effect of substrate bias. Appl. Surf. Sci. 2011, 257, 1990-1995.
14. **Yongxia Wang**, Yinping Ye, Hongxuan Li, Li Ji, Yongjun Wang, Xiaohong Liu, Jianmin Chen, Huidi Zhou. Microstructure and tribological properties of the a-C:H films deposited by magnetron sputtering with CH₄/Ar mixture. Surf. Coat. Technol. 2011, 205, 4577-4581.
15. **王永霞**, 冶银平, 李红轩, 吉利, 陈建敏, 周惠娣. 退火温度对a-C:H膜结构及摩擦学性能的影响. 无机材料学报 2011, 26, 209-213.

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

相关链接

崇德博学



砺志尚实

东华大学环境科学与工程学院

College of Environmental Science and Engineering, Donghua University



联系方式

地址: 上海市松江区人民北路2999号

邮编: 201620

电话: 021-67792159