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【个人简历】

1982年元月毕业于西北师范大学化学系, 1986年6月获中科院兰州化物所理学硕士学位; 2001年9月进入兰州大学攻读博士学位, 在力虎林教授指导下开展纳米材料的控制合成与表征研究, 2004年6月完成博士学位后, 返回西北师大继续从事物理化学教学和科研工作。

【科学研究】

科学研究经历多个领域: 在人工合成膜分离方面, 主要开展了人工反渗透膜传质过程的基础研究, 用Pitzer理论解决了膜过程的渗透压计算问题, 提出了反渗透膜性能预测模型; 此外, 在国内首先合作开展了溶液等离子体降解污染物的研究; 目前, 研究兴趣主要集中在电化学相关能源材料方面, 力求从动力学和热力学相结合的观点多角度揭示材料结构与其电化学性能之间的关系。迄今, 在J. Phys. Chem. C; J. Mater. Chem.; ACS Appl. Mater. Interfaces; Electrochem. Commun.; Electrochim. Acta; RSC Adv.; 科学通报; 化学学报; 化工学报 和物理化学学报 等学术期刊上发表研究论文80余篇。其中, 4篇研究论文被包括J. Phys. Chem. C在内的相关期刊列为Top类文章, 引用百次以上的论文6篇, 2篇为高被引用论文。授权发明专利5项。

【教学工作】

主讲过的课程主要有: 《物理化学》, 《化工热力学》, 《物理化学实验》, 《高等数学》, 《电化学基础与应用》, 《化学电源》等。获得并维持省级物理化学精品课程。

【社会贡献】

作为技术负责人完成的“双钠”冶炼废弃烟气综合利用新工艺, 已在金川有色金属公司实现工业化, 达到年产15万吨的生产规模, 为地区经济发展和环境改善做出了有益贡献; 多年担任《石化技术与应用》杂志编委; 应邀为Adv. Mater., Adv. Funct. Mater., Chem. Mater., J. Mater. Chem., J. Phys. Chem. C, ACS Appl. Mater. Interfaces, Electrochem. Commun., Electrochim. Acta; RSC Adv., Microporous and Mesoporous Materials, Materials Science & Engineering A, Journal of Alloys and Compounds等十余种学术期刊多次进行论文同行评议; 多年应邀参与国家自然科学基金、中国博士后科学基金项目的评审。

【基金项目】

- (1) 国家自然科学基金(地区)基金(20963009): 钴基层状混合氢氧化物超级电容器材料的合成与性能;
- (2) 国家自然科学基金(地区)基金(21163017): 钴酸镍/还原氧化石墨烯复合物的控制合成及其在超级电容器电极材料中的应用;
- (3) 国家自然科学基金(地区)基金项目(201563027): 葱醌及其衍生物非共价功能化还原氧化石墨烯的制备与超电容性能;
- (4) 教育部博士点基金项目(20126203110001): 石墨烯基混合金属氧化物复合物的有序结构与超电容行为。

(5) 甘肃省自然科学基金重点项目 (0803RJA005): 多孔导电聚合物复合膜电极的制备与应用研究

【代表性论文】 (IF > 3.0):

- [1] Yufeng An, Zhimin Li, Yuying Yang, Bingshu Guo, Ziyu Zhang, Hongying Wu and Zhongai Hu*, Synthesis of hierarchically porous nitrogen-doped carbon nanosheets from agaric for high-performance symmetric supercapacitors, *Advanced Materials Interfaces*, (DOI: 10.1002/admi.201700033)
- [2] Bingshu Guo, Yuying Yang, Zhongai Hu*, Yufeng An, Quancai Zhang, Xia Yang, Xiaotong Wang and Hongying Wu, Redox-active organic molecules functionalized nitrogen-doped porous carbon derived from metal-organic framework as electrode materials for supercapacitor, *Electrochimica Acta*, 2017, 223, 74-84.
- [3] Zhimin Li, Yufeng An, Zhongai Hu*, Ning An, Yadi Zhang, Bingshu Guo, Ziyu Zhang, Yuying Yang and Hongying Wu, Preparation of a two-dimensional flexible MnO₂/graphene thin film and its application in a supercapacitor, *Journal of Materials Chemistry A*, 2016, 4, 10618-10626.
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- [11] Ning An, Yufeng An, Zhongai Hu*, Yadi Zhang, Yuying Yang and Ziqiang Lei, Green and all-carbon asymmetric supercapacitor based on polyaniline nanotubes and anthraquinone functionalized porous nitrogen-doped carbon nanotubes with high energy storage performance, *RSC Advances*, 2015, 5, 63624-63633.
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