李会会

所属学院 化工学院

学科领域 电化学

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个人简介

专注于新能源材料的合成方法学研究，并将催化剂应用于燃料电池相关的小分子以及碳基小分子制备液体燃料与高附加值化工品的电催化应用研究。面向氧气、氢气、二氧化碳等能源小分子的高效转化应用，在原子尺度设计和精准制备纳米电催化材料，结合先进的原位表征技术，通过调控材料表界面活性位点的原子与电子结构，探索反应分子在催化剂表界面吸脱附过程中的关键影响因素与调控机制。

研究方向

电催化

研究成果及主要发表文章

1. Hui-Hui Li, Shu-Hong Yu*, “Recent Advances on Controlled Synthesis and Engineering of Hollow Alloyed Nanotubes for Electrocatalysis.” Adv. Mater., 2019, 31, 1803503.

2. Hui-Hui Li, Si-Yue Ma, Qi-Qi Fu, Xiao-Jing Liu, Liang Wu, Shu-Hong Yu*, Scalable Bromide-Triggered Synthesis of Pd@Pt Core-Shell Ultrathin Nanowires with Enhanced Electrocatalytic Performance toward Oxygen Reduction Reaction,J. Am. Chem. Soc.,2015, 137, 7862-7868. (ISI Highly Cited Paper)

3. Hui-Hui Li, Shuo Zhao, Ming Gong, Chun-Hua Cui, Da He, Hai-Wei Liang, Liang Wu, Shu-Hong Yu*, Ultrathin PtPdTe Nanowires as Superior Catalysts for Methanol Electrooxidation, Angew. Chem. Int. Ed., 2013, 52, 7472-7476.

4. Hui-Hui Li,† Qi-Qi Fu,† Liang Xu, Si-Yue Ma, Ya-Rong Zheng, Xiao-Jing Liu, Shu-Hong Yu*, Highly crystalline PtCu nanotubes with three dimensional molecular accessible and restructured surface as methanol oxidation catalysts,Energy Environ. Sci., 2017, 10, 1751-1756.

5. Si-Yue Ma#, Hui-Hui Li#, Bi-Cheng Hu, Xiang Cheng, Qi-Qi Fu, Shu-Hong Yu*, Synthesis of Low Pt-based Quaternary PtPdRuTe Nanotubes with Optimized Incorporation of Pd for Enhanced Electrocatalytic Activity,J. Am. Chem. Soc., 2017,139, 5890-5895. (ISI Highly Cited Paper)

6. Hui-Hui Li#, Mao-Lin Xie#, Chun-Hua Cui#, Da He, Ming Gong, Jun Jiang*, Ya-Rong Zheng, Gang Chen, Yong Lei, and Shu-Hong Yu*, Surface Charge Polarization at the Interface: Enhancing the Oxygen Reduction via Precise Synthesis of Heterogeneous Ultrathin Pt/PtTe Nanowire,Chem. Mater.,2016, 28, 8890-8898. (Front Cover)