



所属学院 化工学院

学科领域 化学工程与技术

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个人简介

教育背景:

1994. 9–1997. 7 华东理工大学工业催化研究所 博士研究生 导师: 汪仁先生

工作经历:

1997. 9–1999. 4 复旦大学化学系 博士后 导师: 邓景发院士

1999. 4–2003. 2 德国 ULM 大学表面与催化系 博士后 导师: R. J. Behm 教授

2003. 3–2004. 11 美国德克萨斯 A&M 大学 (College Station) 博士后 导师: D. W. Goodman 和 J. H. Lunsford 教授

2004. 11–2009. 9 新加坡科技研究局化学与工程科学研究院高级研究员

2009. 9– 至今 华东理工大学化工学院化学工程国家重点实验室, 校特聘教授 (海归团队引进)、化学工程专业博士生导师,

2015. 1– 至今 兼郑州大学化工与能源学院院长

研究方向

1. 煤化工催化剂的设计与制备
2. 纳米催化剂制备及原位表征技术
3. 动态现场原位分子光谱 (Operando) 表征

研究成果及主要发表文章

1. Xue-jing Yang, Peng-fei Tian, Hua-lin Wang, Jing Xu, Yi-fan Han*, "Catalytic decomposition of H₂O₂ over a Au/carbon catalyst: A dual intermediate model for the generation of hydroxyl radicals", J. Catal., 2016, 336, 126-132.
2. Like Ouyang, Peng-fei Tian, Guo-jin Da, Xin-chao Xu, Can Ao, Tian-yuan Chen, Rui Si, Jing Xu, Yi-Fan Han*, "The origin of active sites for direct synthesis of H₂O₂ on Pd/TiO₂ catalysts: Interfaces of Pd and PdO domains", J. Catal., 2015, 321, 70-80.
3. Xue-jing Yang, Peng-fei Tian, Xiao-man Zhang, Xin Yu, Ting Wu, Jing Xu and Yi-Fan Han*, "The generation of hydroxyl radicals by hydrogen peroxide decomposition on FeOCl/SBA-15 catalysts for phenol degradation", AIChE J., 2015, 61(1), 166-175.
4. Donglong Fu, Weiwei Dai, Xin-Chao Xu, Wei Mao, Junjie Su, Zhengpai Zhang, Bianfang Shi, Julian Smith, Ping Li, Jing Xu and Yi-Fan Han*, "Probing The Structure Evolution of Iron-Based Fischer–Tropsch to Produce Olefins by Operando Raman Spectroscopy", ChemCatChem, 2015, 7(5), 752–756.
5. Like Ouyang, Guo-jin Da, Peng-fei Tian, Tian-yuan Chen, Guo-da Liang, Jing Xu and Yi-Fan Han*, "Insight into active sites of Pd-Au/TiO₂ catalysts in hydrogen peroxide synthesis directly from H₂ and O₂", J. Catal., 2014, 311, 129-136.
6. Xue-jing Yang, Xi-meng Xu, Jing Xu, Yi-Fan Han*, "Iron Oxychloride (FeOCl): An Efficient Fenton-Like Catalyst for Producing Hydroxyl Radicals in Degradation of Organic Contaminants", J. Am. Chem. Soc., 2013, 43, 16058–16061.
7. Jing Xu, Xin-Chao Xu, Like Ouyang, Xue-jing Yang, Wei Mao, Junjie Su, Yi-Fan Han*, "Mechanistic study of preferential CO oxidation on a Pt/NaY Zeolite Catalyst", J. Catal., 2012, 287, 114-123.
8. Jing Xu, Tim White, Ping Li, Chongheng He, Jianguo Yu, Weikang Yuan, and Yi-Fan Han*, "Biphasic Pd-Au Alloy Catalyst for Low-Temperature CO Oxidation", J. Am. Chem. Soc., 2010, 132, 10398-10406.