



Department: School of Chemistry and Molecular Engineering  
 Professional field: Catalysis, Green Chemistry  
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## Profile

### 1) Education

1996: PhD, Physical Chemistry, Lanzhou institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China.

1990: ME, Dalian institute of Chemical Physics, Chinese Academy of Sciences. Dalian, China.

1987: BE, Shaanxi Normal University, Xi'an, China.

### 2) Academic Experience

2006-present: East China University of Science & Technology, Shanghai, China. Full Professor.

2002-2006: Max-Planck-Institut für Kohlenforschung, Muelheim, Germany, Postdoctoral Researcher.

1999 - 2002: Institute of Chemistry, Chinese Academy of Sciences, Beijing, China. Postdoctoral Researcher.

1996-2002: Research Assistant, Xinjiang Institute of Chemistry, Chinese Academy of Sciences, Urumqi, China.

## Research Field

Green Catalysis, Utilization of carbon resources.

## Research results and selected published papers

- (1). Yunxiang Qiao, Wenbao Ma, Nils Theyssen, Chen Chen, Zhenshan Hou\*, Temperature-Responsive Ionic Liquids: Fundamental behaviors and catalytic applications[J], Chemical Reviews, 2017, 117: 6881-6928.
- (2). Wenbao Ma, Haiyang Yuan, Haifeng Wang, Qingqing Zhou, Kang Kong, Difan Li, Yefeng Yao, Zhenshan Hou\*, Identifying catalytically active mononuclear peroxyoniobate anion of ionic liquids in the epoxidation of olefins, ACS Catalysis, 2018, 8: 4645–4659.
- (3). Wenbao Ma, Chen Chen, Kang Kong, Qifeng Dong, Kun LI, Mingming Yuan, Difan Li, Zhenshan Hou\*, Peroxotantalate-based ionic liquid catalyzed epoxidation of allylic alcohols with hydrogen peroxide[J], Chemistry-An European Journal, 2017, 23: 7287-7296.
- (4). Chen Chen, Haiyang Yuan, Haifeng Wang, Yefeng Yao, Wenbao Ma, Jizhong Chen, Zhenshan Hou, Highly Efficient Epoxidation of Allylic Alcohols with Hydrogen Peroxide Catalyzed by Peroxoniobate-Based Ionic Liquids [J]. ACS Catalysis, 2016, 6: 3354-3364.
- (5). Mei Qu, Shuai Chen, Wenbao Ma, Jiangang Chen, Kang Kong, Fengwei Zhang, Huan Li, Zhenshan Hou, Xian-Ming Zhang, Phase Transfer of Nanoparticles Using an Amphiphilic Ionic Liquid [J], Langmuir, 2016, 32: 13746-13751.
- (6). Wenwen Zhu, Hanmin Yang, Jizhong Chen, Chen Chen, Li Guo, Huimei Gan, Xiuge Zhao, Zhenshan Hou, Efficient hydrogenolysis of cellulose into sorbitol catalyzed by a bifunctional catalyst [J], Green Chemistry, 2014, 16: 1534-1542.
- (7). Chen Chen, Xiuge Zhao, Jizhong Chen, Li Hua, Ran Zhang, Li Guo, Baoning Song, Huimei Gan, Zhenshan Hou, Niobium peroxide-catalyzed epoxidation of allylic alcohols with excellent activity and selectivity[J], ChemCatChem, 2014, 6:3231-3238.
- (8). Ran Zhang, Zhenshan Hou\*, The Chapter 5: Soluble Pd Nanoparticles for Catalytic Hydrogenation in Nanocatalysis in Ionic Liquid, Wiley-VCH, Geramny, 2016, ISBN: 978-3-527-33910-5.
- (9). Zhenshan Hou, Buxing Han, The Chapter 11: Coupling Reactions with Supported Ionic Liquid Catalysts in Supported Ionic Liquid, Wiley-VCH, Germany, 2014, ISBN: 978-3-527-32429-3.
- (10).Yunxiang Qiao, Zhenshan Hou\*, The Chapter 5 and 6: Green Methods for the Epoxidation of Olefins Using Venturello Anion-Based Catalysts in Green Synthesis Vol I, CRC press, 2014, ISBN: 978-1-4665-1320-4.