

刘晓焕，女，河北邯郸人，博士，讲师，硕士生导师。2015年南开大学无机化学专业毕业，现工作于河北工程大学材料科学与工程学院。目前主持科研项目2项，参与教育厅项目1项，近年来已在国内外著名刊物如 *Angew. Chem. Int. Ed.* 等刊物上发表论文17篇，参与申请发明专利4项



### 一、主要招生专业及研究方向

金属-有机框架的设计及在 CO<sub>2</sub> 中的催化转化

#### 联系方式

QQ: 1620527337

邮箱: [1620527337@QQ.com](mailto:1620527337@QQ.com)

### 二、部分代表性论文

(1) **Xiao-Huan Liu**, Jian-Gong Ma\*, Zheng Niu, Guang-Ming Yang, Peng Cheng\*, An Efficient Nanoscale Heterogeneous Catalyst for the Capture and Conversion of Carbon Dioxide at Ambient Pressure, *Angew. Chem. Int. Ed.* 2015, 54(3): 988-991(Very Important Paper)

(2) Ning-Ning Zhu<sup>#</sup>, **Xiao-Huan Liu**<sup>#</sup>, Tao Li, Jian-Gong Ma\*, Peng Cheng, Guang-Ming Yang, Composite System of Ag Nanoparticles and Metal-Organic Frameworks for the Capture and Conversion of Carbon Dioxide under Mild Conditions, *Inorg. Chem.* 2017, 56, 3414-3420

(3) Yu-Qing Guo, Tao Chang, **Xiao-Huan Liu**\*, A highly porous polyhedron-based metal-organic framework exhibiting large C<sub>2</sub>H<sub>2</sub> storage capability. *Inorg. Chem. Comm.*, 2018, 87, 17-19.

(4) Yong Xie, Ting-Ting Wang, **Xiao-Huan Liu**, Kun Zou, Wei-Qiao Deng\*, Capture and Conversion of CO<sub>2</sub> at Ambient Conditions by a Conjugated Microporous Polymer, *Nat. Commun.*, 2013, 4: 1960

(5) Shuai-Shuai Yu, **Xiao-Huan Liu**, Jian-Gong Ma\*, Zheng Niu, Peng Cheng\*, A new catalyst for the solvent-free conversion of CO<sub>2</sub> and epoxides into cyclic carbonate under mild conditions, *Journal of CO<sub>2</sub> Utilization*, 2016, 14:122-125

(6) Caijuan Liu, **Xiao-Huan Liu**, Bo Li, Lei Zhang, Jian-Gong Ma\*, Peng Cheng, Salen-Cu(II)@MIL-101(Cr) as an efficient heterogeneous catalyst for cycloaddition of CO<sub>2</sub> to epoxides under mild conditions, *Journal of Energy Chemistry*, 2017, 26: 821-824

(7) **Xiao-Huan Liu**, Zhi-Hong Ma, Li-Juan Tian, Xue-Zhong Zheng, Jin Lin\*. Cyclopentadienyl Diruthenium Metal Carbonyl Complexes Bearing Pendant Thienyl Ligands. *Transition Met Chem.*, 2010, 35, 393.

### 三、承担项目及经费

1、河北省自然科学基金青年项目：基于含铝 MOFs 为载体的 Ag@MOFs 催化剂的制备及其用于 CO<sub>2</sub> 催化反应性能的研究，2017.1-2019.12，4 万元（排名第一）

2、河北工程大学博士基金项目：以 MOFs 为载体的高效 CO<sub>2</sub> 吸附转化复合材料制备及性能研究，2017.1-2019.12，4 万，（排名第一）