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#### 工作及教育经历:

200409-200801 中国石油大学（华东），化学工程与技术，博士

200407-201307 辽宁石油化工大学 化学化工与环境学部 讲师，副教授，教授；

2009.03-2009.08 东京工业大学资源化学研究所，高级访问学者；

2009.09-2012.09 韩国化学研究院绿色化学部，博士后高级研究员；

201307- 至今，天津工业大学，环境与化学工程学院，教授。

#### 荣誉称号:

Green Chemistry, Energy & fuels 等十余种国际刊物审稿人

2011 年入选 辽宁省优秀人才；

2013 年获 抚顺市第五届自然科学青年学科带头人；

2015 年 入选 天津“三年千人”计划

#### 获奖与社会兼职:

1、“稠环氮化物在 Cu(I)Y 分子筛上的吸附机理研究”，2010 年获辽宁省自然科学学术成果一等奖. 排名第一；

2. New Simple Synthesis Route for Decatungstate Hybrids: Novel Thermo-Regulated Phase Transfer Catalysts for Selective Oxidation of Alcohols, 2013 年获辽宁省自然科学学术成果二等奖. 排名第一；

#### 主持及参加的科研项目:

1. 环境友好型功能化离子液体的合成及其催化氧化深度脱硫(21103077)，国家自然科学基金，负责人

2. 酸性离子液体的分子设计及其在油品氧化脱硫中的应用，天津市应用基础与前沿技术研究计划，负责人

3. 燃料油选择性脱硫吸附剂的分子设计（LJQ2011035），辽宁省高等学校优秀人才支持计划，负责人

4. 清洁燃料在铜或银金属有机骨架材料上选择性吸附脱硫机理的研究(201102120), 省自然科学基金, 负责人
5. 十聚钨酸季铵盐的合成及其在醇选择性清洁氧化中的应用(2010243), 辽宁省教育厅, 负责人
6. Development of magnesium-based medium-temperature sorbents for CO<sub>2</sub> capturing in an energy-exchangeable fluidized bed, 2012.6-2017.6, 韩国科技部 (KCCS 2020 project), 主要参与者

#### 代表性学术论文:

1. **Dan Liu**, Won Choon Choi, Na Young Kang, You Jin Lee, Hun Su Park, Chae-Ho Shin, Yong-Ki Park\*, Intercconversion of light olefins over ZSM-5 based cracking catalysts, *Catalysis Today*, 2014, 226: 52-66
2. **Dan Liu**, Jianzhou Gui\*, Daosheng Liu, Xilai Peng, Shuang Yang, Zhaolin Sun, Deep oxidative desulfurization of real diesel catalyzed by Na<sub>2</sub>WO<sub>4</sub> in ionic liquid, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 2013, 35(1): 1-8.
3. **Dan Liu**, Jianzhou Gui, Feng lu, Zhaolin Sun, Yong-Ki Park, New Simple Synthesis Route for Decatungstate Hybrids: Novel Thermo-Regulated Phase Transfer Catalysts for Selective Oxidation of Alcohols, *Catal Lett*, 2012, 142(11):1330-1335.
4. **Dan Liu**, Jianzhou Gui\*, Yong-Ki Park, Shuang Yang, Yuhuan Gao, Xilai Peng, Zhaolin Sun, Deep oxidative desulfurization of real diesel with task-specific ionic liquid, *Korean J. Chem. Eng.*, (2012) 29(1): 49-53.
5. **Dan Liu**, Jianzhou Gui\*, Daosheng Liu, Juyoung Lee, Shuang Yang, Zhaolin Sun, Oxidation of dibenzothiophene catalyzed by Na<sub>2</sub>WO<sub>4</sub> in a halogen-free ionic liquid, *Reac Kinet Mech Cat.*, (2011) 104:111-123.
6. **Dan Liu**, Won Choon Choi, Chul Wee Lee, Na Young Kang, You Jin Lee, Yong Ki Park, Steaming and washing effect of P/HZSM-5 in catalytic cracking of naphtha, *Catalysis Today*, 2011, 164(1), 154-157.
7. Gui Jianzhou\*, **Liu Dan**, Wang Chan, Darong Min, Sun Zhaolin. Deep Oxidative Desulfurization with Task-specific Ionic Liquids: an experimental and computational study, *J. Mol. Catal. A*, 2010, 331(1-2):64-70
8. **Dan Liu**, Jianzhou Gui \*, Yulian Yang, Feng Lu, Zhaolin Sun. Oxidative aromatization of Hantzsch 1,4-dihydropyridines catalyzed by ferric perchlorate in ionic liquids with air, *Synth. Commun.*, 2010, 40, 1004-1008.
9. Jianzhou Gui, **Dan Liu**, Yulian Yang, Feng Lu, Zhaolin Sun. One-pot synthesis of 3,4-dihydropyrimidin-2(1H)-ones catalyzed by acidic ionic liquids under solvent-free conditions, *Synth. Commun.*, 2009, 39, 3436-3443.
10. **Dan Liu**, Jianzhou Gui, Zhaolin Sun. Adsorption structures of heterocyclic nitrogen compounds over Cu(I)Y zeolite: a first principle study on mechanism of the denitrogenation and the effect of nitrogen compounds on adsorptive desulfurization *Journal of Molecular Catalysis A: Chemical*, 2008, 291: 17-21.
11. **Dan Liu**, Jianzhou Gui, Lijuan Song, Xiaotong Zhang, Zhaolin Sun. Deep desulfurization of diesel fuel by extraction with task-specific ionic liquids. *Petroleum Science and Technology*, 2008, 26(9): 973-982.
12. **Dan Liu**, Jianzhou Gui, Xiangqin Zhu, Lijuan Song, Zhaolin Sun. Synthesis and Characterization of Task-Specific Ionic Liquids Possessing Two Brønsted Acid Sites. *Synthetic Communications*, 2007, 37, (5): 759 – 765

13. **Dan Liu**, Lijuan Song, Jianzhou Gui, Shi Liu and Zhaolin Sun. Adsorption structures of heterocyclic sulfur compounds on Cu (I)Y zeolite: a first principle study. *Studies in Surface Science and Catalysis*, 2007, 170(B):1699-1704.

14. **Dan Liu**, Jianzhou Gui, Shi Liu, Lijuan Song, Xiaotong Zhang and Zhaolin Sun. A density functional study of the chemisorption of thiophene on Cu(I)Y zeolite. *Am. Chem. Soc. Div. Fuel. Chem. Prepr.*, 2006, 51(1):234-235.

#### 学术报告:

1. 2015 2.9-2.12 The 5th Korea international CCS conference, oral presentation, "Towards reproducible preparation of dry CO<sub>2</sub> sorbents for energy exchangeable fluidized bed process".

2. 2014 02.24-2.26, The 4th Korea international CCS conference, oral presentation

任职: Chairman of Dry Sorbents Section,

邀请报告: Developing dry sorbents for CO<sub>2</sub> capture in energy exchangeable fluidized bed process;

3. 2013 03.13-03.15, The 3rd Korea international CCS conference, oral presentation

口头报告: Mg-based medium-temperature sorbents for CO<sub>2</sub> capture in an energy-exchanged fluidized-bed process;

4. 2012 04.09-04.14 The 2nd Korea international CCS conference, Post presentation.

**Dan Liu**, Wonchoon Choi, DaYoung Min, NaYoung Kang, Jianzhou Gui, Yongki Park. Novel hierarchical CaO Based sorbents for CO<sub>2</sub> capture,

5. 201009.12-09.16 2nd Asia Pacific Conference on Ionic Liquids and Green Processes

口头报告: Deep Catalytic Oxidative desulfurization from diesel with task-specific ionic liquids

6. 2007 0812 - 0817, the 15th International Zeolite Conference, Poster

**Dan Liu**, Lijuan Song, Jianzhou Gui, Shi Liu and Zhaolin Sun, Adsorption structures of heterocyclic sulfur compounds on Cu (I)Y zeolite: a first principle study. *Studies in Surface Science and Catalysis*, 2007, 170(B):1699-1704.

#### 发明专利:

1. 一种脱氧催化剂及其制备方法和应用, 中国发明专利, 专利号 ZL 200610134892.X

2. 二氧化碳吸附剂及其制备方法 (Carbon dioxide absorbent and fabricating method thereof) PCT 专利: 10-2012-0084791(第一发明人)

3. 二氧化碳吸附剂及其二氧化碳捕获工艺 (Carbon dioxide absorbent and carbon dioxide capture process thereof) PCT 专利, 10-2013-0137793

4. 杂多酸型离子液体及其在氧化脱硫中的应用, 中国发明专利, 申请号: 201510005652.9

5. 复合离子液体钢铁缓蚀剂及应用; 中国发明专利, 申请号: 201410776405.4;

6. 一种高氯容液相脱氯剂及其制备方法和应用, 中国发明专利, 申请号: 201410776492.3

7. 一种催化湿式氧化催化剂的制备方法, 中国发明专利, 申请号: CN201510132896

8. 一种环戊烯选择性氧化制备环戊酮的方法，中国发明专利，申请号：CN201510132897
9. 一种中温二氧化碳吸附剂及其制备方法和应用，中国发明专利，申请号：201510392559.8