Jichang Liu

Department: School of Chemical Engineering
Professional field: Chemical Engineering and Technology
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Profile

Education

2007: PhD, Chemical Technology, ECUST, China.

2002: BS, Chemical Engineering and Technology, ECUST, China.

Academic Experience

2018-present: Professor, School of Chemical Engineering, ECUST, China.

2011-2012: Visiting scholar, School of Engineering, Princeton University, USA

2009-2018: Associate professor, School of Chemical Engineering, ECUST, China.

2007-2009: Lecturer, School of Chemical Engineering, ECUST, China.

Research Field

1. Efficient utilization and clean transformation of oil and gas resources based on molecular management
2. Synthesis and adsorption separation of porous materials such as molecular sieve and MOFs
3. Molecular level reaction kinetic model of molecular refining and petroleum processing
4. Lubricant formula and processing technology

Research results and selected published papers

1. Jichang Liu#*, Shimin Zhao, Xiang Chen, Benxian Shen. Upgrading FCC gasoline through adsorption separation of normal hydrocarbons. Fuel. 2016, 166, 467-472
2. Jichang Liu#*, Zhenfei Cheng, James Wei, Qiancheng Zhang, Xiang Chen, Yuhao Cen, Linfeng Li. Mean stop paths and diffusion regimes of molecules in one-dimensional zeolite channels. Chem. Eng. Sci.2017, 172, 117-124
3. Jichang Liu#*, Hua Chen, Zhipeng Pi, Yifeng Liu, Hui Sun, Benxian Shen. Molecular-level process model with feedback of the heat effects on a complex reaction network in a fluidized catalytic cracking process.Ind. Eng. Chem. Res. 2017, 56, 3568-3577
4. Liu Jichang#*, Chen Xiang, Zhao Shimin, Cao Xin, Shen BenXian. Multicycle investigation of normal paraffin separation from naphtha to improve olefin and aromatic feed. Ind. Eng. Chem. Res. 2015, 54, 12664-12670
5. Bohan Shan#, Jiuhao Yu, Mitchell R. Armstrong, Dingke Wang, Bin Mu*, Zhenfei Cheng, Jichang Liu*. A cobalt metal-organic framework with small pore size for adsorptive separation of CO2 over N2 and CH4. AIChE J. 2017, 60, 4532-4540
6. Balzer C#, Armstrong M, Bohan Shan, Yingjie Huang, Jichang Liu*, Bin Mu*. Modeling nanoparticle dispersion in electrospun nanofibers. Langmuir. 2018, 34, 1340-1346
7. Tongmei Ding#, Hengshui Tian*, Jichang Liu*, Wenbin Wu, Bingqin Zhao. Effect of promoters on hydrogenation of diethyl malonate to 1,3-propanediol over nano copper-based catalysts. Catal. Commun. 2016, 74, 10-15
8. Mitchell R. Armstrong#, Bohan Shan, Zhenfei Cheng, Dingke Wang, Jichang Liu*, Bin Mu*. Adsorption and diffusion of carbon dioxide on the metal-organic framework CuBTB. Chem. Eng. Sci. 2017, 167, 10-17
9. Zhipeng Pi#, Benxian Shen*, Jigang zhao, Jichang Liu*. CuO, CeO2 modified Mg-Al spinel for removal of SO2 from FCC flue gas. Ind. Eng. Chem. Res. 2015, 54, 10622-10628
10. Chuanjun Ge#, Xiang Zhang, Jian Liu, Feng Jin, Jichang Liu*, Hong Bi*. Hollow-spherical composites of Polyaniline/Cobalt Sulfide/Carbon nanodots with enhanced magnetocapacitance and electromagnetic wave absorption capabilities. Appl. Surf. Sci. 2016, 378, 49-56