



Department: School of Chemical Engineering
Professional field: Chemical Engineering and Technology
E-mail: zhangqi@ecust.edu.cn

Profile

Education

2007: PhD, Applied Chemistry, Tokyo university of Agriculture and Technology, Japan
2004: MS, Chemical Engineering, East China University of Science and Technology, China
2001: BS, Chemical Engineering, East China University of Science and Technology, China.

Academic Experience

2018-present: Professor, School of Chemical Engineering, ECUST, China.
2008-2018: Associate professor, School of Chemical Engineering, ECUST, China.
2007-2008: Postdoctoral Research, Chemical Engineering Department, Tokyo university of Agriculture and Technology, Japan

Research Field

Research Areas include:

Design of fuel cell reforming system and micro-reformer
Preparation of novel Functional Catalytic Materials and their applications in air purification soil remediation and wastewater treatment
Study on adsorption behavior and heavy metal migration behavior in soil during environmental remediation

Research results and selected published papers

- 1) Qi Zhang, Tianyu Wang, Wenzhao Fu, Shaofeng Xuan, Facet-Dependent Performance of Hydroxylated Anodic Boehmite for Catalyzing Gaseous Formaldehyde Oxidation, catalysis letter, 2018, in press
- 2) Feiyue Fan, Zhang, Q, Hou, Hong. A Structured Cu-Based/ γ -Al₂O₃/Al Multifunctional Catalyst for Steam Reforming of Dimethyl Ether: Investigation on in-Situ CO Reduction Strategy. Industrial & Engineering Chemistry Research. 2018, 57(6), 2426-2433
- 3) Qi Zhang*, Yameng Chu, Xiaoqian Deng, Li Zhang; Hualong Chu, Improvement of a Mesh-Type Cu/Ni/ γ -Al₂O₃/Al Catalyst for Steam Reforming of Dimethyl Ether by Metal (Fe, Zn or La) Addition for CO in Situ Removal. Modern Research in Catalysis 2018, 7(1), 1-16
- 4) Hua long Chu, Qi Zhang*, Yameng Chu, Qiang Ding, Qiang Wang, Hong Xu, Li Zhang*, Innovative Cu/Ni/Fe/ γ -Al₂O₃/Al mesh-type catalyst and compact plate reactor design for steam reforming of dimethyl ether, Catalysis Today, in press
- 5) Zhang Q*, Peng Dong, Zhang Sai, Ye Qian, Wu Yongqiang, Ni Yanhui. Absorption Behaviors and Kinetic Models Analysis of Li₄SiO₄ under Various CO₂ Partial Pressures. AIChE Journal, 2017, 63 (6), 2153-2164.
- 6) Zhang, Sai; Chowdhury, Muhammad; Zhang Q*; de Lasa, Hugo. A Novel Fluidizable K-Doped HAc-Li₄SiO₄ Sorbent for CO₂ Capture: Preparation and Characterization. Industrial & Engineering Chemistry Research. 2016, 55 (49), 12524-12531.
- 7) Feiyue Fan, Zhang Q*, Xing Wang, Yanhui Ni, Yongqiang Wu, Zibin Zhu. A structured Cu-based/c-Al₂O₃/Al plate-type catalyst for steam reforming of dimethyl ether: Self-activation behavior investigation and stability improvement. Fuel, 186 (2016) 11-19.
- 8) Zhang Q*, Chen Shen, Yongqiang Wu. Steam Methane Reforming Reaction Enhanced by a Novel K₂CO₃-Doped Li₄SiO₄ Sorbent: Investigations on the Sorbent and Catalyst Coupling Behaviors and Sorbent Regeneration Strategy. International Journal of Hydrogen Energy, 941(2016): 4831-4842.
- 9) Zhang Q*, Hongjuan Luan, Tao Li, Yongqiang Wu, Yanhui Ni. Study on Pt-structured anodic alumina catalysts for catalytic combustion of toluene: Effects of competitive adsorbents and competitive impregnation methods. Applied Surface Science, 360(2016):1066-1074. (第一 / 通讯)
- 10) Zhang Q*, Xing Wang, Feiyue Fan, Yongqiang Wu, Yanhui Ni. Preparation and catalytic behavior of second metal Ni supported on a novel conductive structured Cu/ γ -Al₂O₃/Al catalysts through electrolysis on steam reforming of dimethyl ether. Catalysis Communications, 76 (2016):67-71.
- 11) Sai Zhang, Zhang Q*, Chen Shen, Yanhui Ni, Yongqiang Wu and Zibin Zhu. Self-Activation Mechanism Investigations on Large K₂CO₃-Doped Li₄SiO₄ Sorbent Particles. Industrial & Engineering Chemistry Research. 54(2015): 7292-7300.