



Profile

Education

2007: PhD, Chemical Engineering, East China University of Science and Technology, China.

1996: MS, Chemical Engineering, East China University of Science and Technology, China.

1993: Bachelor, Chemical Engineering, East China University of Science and Technology, China.

Academic Experience

2014-present: Professor, School of Chemical Engineering, ECUST, China.

2003-2014: Associate professor, School of Chemical Engineering, ECUST, China.

2012-2013: Visiting Scholar, Chemical Engineering Department, University of California, Santa Barbara, USA

1996-2003: Lecture, School of Chemical Engineering, ECUST, China.

Research Field

The research direction is to strengthen the multi-scale catalytic reaction process, to organically combine the traditional reaction engineering theory with catalytic chemistry, new material preparation, computational chemistry and other fields, so as to provide the technical basis for the development of more efficient and higher utilization catalyst and new processes with high efficiency, energy saving and less pollution. As the project leader, he has completed or is in the process of carrying out many projects of NSFC, national key R & D plan, Sinopec and other enterprises. He has published more than 40 SCI papers, cited more than 1000 times, and cited up to 500 times for a single SCI paper; he has applied for 26 patents and authorized 15. The main research directions include:

Catalysis and reaction engineering

Design and application of structured catalyst / reactor

Synthesis of alcohol chemicals from Syngas

Preparation of bulk chemicals by catalytic conversion of sugar and alcohol

Research results and selected published papers

1. Yang Shirun, Zhang Zilan, Sui Zhijun, Zhou* Jinghong, Zhou Xingguui, Hierarchical NiCo LDH-rGO/Ni foam composite as electrode material for high-performance supercapacitors, Transactions of Tianjin University, 2019, 25: 266-275
2. Zheng Sainan, Xu Shiwei, Zhou* Jinghong, Shen Rongchun, Ji Yang, Shen Ming, Li Wei*, Insight into the Claisen condensation of methyl acetate and dimethyl carbonate to dimethyl malonate, New Journal of Chemistry, 2018, 42(9): 6689-6694
3. Chen Yang, Zhang Zilan, Sui Zhijun, Zhou Jinghong *, Zhou Xingguui. Ni(OH)₂ nanowires grown on graphite foam as advanced supercapacitor electrodes with improved cycling performance. Internation. Journal. Of Hydrogen Energy, 2016, 41(28): 12136-12145
4. Xie Duanpeng, Zhou Jinghong*, Mleczko Leslaw, Tian Shizhe, Zhou Xingguui, Comparative study of clogging in the valve and cascade mixers, Chemical Engineering & Technology, 2016, 39 (8):1451-1456
5. Deng Chenghao, Leng Li, Duan Xuezhi, Zhou Jinghong*, Zhou Xingguui, Yuan Weikang, Support effect on the bimetallic structure of Ir-Re catalysts and their performances in glycerol hydrogenolysis, Journal of Molecular catalysis A: Chemical, 2015, 410:81-88
6. Deng Chenghao, Duan Xuezhi, Zhou Jinghong*, Zhou Xingguui, Yuan Weikang, Susannah Scott. Ir-Re alloy as a highly active catalyst for the hydrogenolysis of glycerol to 1,3-propanediol, Catalysis Science & Technology , 2015, 5: 1540-1547.
7. Deng Chenghao, Duan Xuezhi, Zhou Jinghong*, Chen De, Zhou Xingguui, Weikang Yuan. Size effects of Pt-Re bimetallic catalysts for glycerol hydrogenolysis, Catalysis Today, 2014, 234: 208-214.
8. Liu Zhiting, Duan Xuezhi, Zhou Xingguui, Zhou Jinghong*, Yuan Weikang. Controlling and formation mechanism of oxygen-containing groups on graphite oxide, Industrial and Engineering Chemistry Science, 2014, 53(1): 253-258.
9. Zhou Jinghong*, Liu Guocai, Sui Zhijun, Zhou Xingguui, Yuan Weikang. Hydrogenolysis of sorbitol to glycols over carbon nanofibers supported ruthenium catalyst: the role of base promoter, Chinese Journal of Catalysis, 2014, 35(5): 692-702.
10. Zhao Long, Zhou Jinghong*, Sui Zhijun, Zhou Xingguui. Hydrogenolysis of sorbitol to glycols over carbon nanofiber supported ruthenium catalyst, Chemical Engineering Science, 2010, 65(1): 30-35.
11. Zhou Jinghong, Zhang Mingguang, Zhao Long, Li Ping, Zhou Xingguui, Yuan Weikang. Carbon nanofiber/graphite-felt composite supported Ru catalysts for hydrogenolysis of sorbitol, Catalysis today, 2009, 147S: S225-S229.
12. Zhou Jinghong, Sui Zhijun, Li Ping, Chen De, Dai Yingchun, Yuan Weikang. Characterization of surface oxygen complexes on carbon nanofibers by TPD-MS, XPS and FT-IR, Carbon, 2007, 45 (4): 785-796.

【Granted Patent】

1. Sainan Zheng, Shiwei Xu, Jinghong Zhou, Rongchun Shen, Yang Ji, Ming, Insight into the Claisen condensation of methyl acetate and dimethyl carbonate to dimethyl malonate, New Journal of Chemistry, 2018, 42(9): 6689-6694
2. Shirun Yang, Zilan Zhang, Zhijun Sui, Jinghong Zhou*, Xingguui Zhou, Hierarchical NiCo LDH-rGO/Ni foam composite as electrode material for high-performance supercapacitors, Transactions of Tianjin University, 2018, accepted
3. Duanpeng Xie, Jinghong Zhou, Leslaw Mleczko, Shizhe Tian, Xingguui Zhou, Comparative study of clogging in the valve and cascade mixers, Chemical Engineering & Technology, 2016, 39 (8):1451-1456
4. Yang Chen, Zilan Zhang, Zhijun Sui, Zhiting Liu, Jinghong Zhou*, Xingguui Zhou. Ni(OH)₂ nanowires grown on graphite foam as advanced supercapacitor eletrodes with improved cycling performance. Int. J. Hydrogen Energy, 2016, 41(28): 12136-12145
5. Chenghao Deng, Li Leng, Xuezhi Duan, Jinghong Zhou*, Xingguui Zhou, Weikang Yuan, Support effect on the bimetallic structure of Ir-Re catalysts and their performances in glycerol hydrogenolysis, Journal of Molecular catalysis A: Chemical, 2015, 410:81-88
6. Chenghao Deng, Li Leng, Jinghong Zhou*, Xingguui Zhou, Weikang Yuan, Influence of pretreatment temperature on bimetallic Ir-Re catalyst for glycerol hydrogenolysis, Chinese Journal of Catalysis, 2015, 36 (10): 1750-1758
7. Chenghao Deng, Xuezhi Duan, Jinghong Zhou*, Xingguui Zhou, Weikang Yuan, Susannah Scott, Ir-Re alloy as a highly active catalyst for the hydrogenolysis of glycerol to 1,3-propanediol, Catalysis Science & Technology , 2015, 5, 1540 - 1547