



Department: School of Chemistry and Molecular Engineering

Professional field: Industrial Catalysis

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Profile

1) Education

1998.7: PhD, Industrial Catalysis, East China University of Science & Technology, Shanghai

1995.7: MSc, Physical Chemistry, East China University of Science & Technology, Shanghai

1992.7: BE, Applied Chemistry, East China University of Science & Technology, Shanghai

2) Academic Experience

September 2005 – present

Research Institute of Industrial Catalysis, East China University of Science & Technology

Professor/Director

September 2000 – August 2005

Research Institute of Industrial Catalysis, East China University of Science & Technology

Associate Professor/Vice-Director

July 1998 – August 2000

Research Institute of Industrial Catalysis, East China University of Science & Technology

Assistant Professor

May 2003 – February 2004

Institut de Recherches sur la Catalyse, Centre National de la Recherche Scientifique, France

Postdoctoral Researcher

Research Field

Industrial Catalysis, Environmental Catalysis, Novel Catalytic Materials

Research results and selected published papers

1. Hao Liu, Xian Li, Qiguang Dai, Hailin Zhao, Guangtao Chai, Yanglong Guo*, Yun Guo, Li Wang, Wangcheng Zhan*. Catalytic oxidation of chlorinated volatile organic compounds over Mn-Ti composite oxides catalysts: Elucidating the influence of surface acidity. *Appl Catal B-Environ*, 2021, 282: 119577
2. Bo Lin, Aiyong Wang, Yanglong Guo*, Yuanqing Ding, Wangcheng Zhan*, Li Wang, Yun Guo, Feng Gao*. Elimination of NO Pollutant in Semi-enclosed Spaces over Sodium-promoted Cobalt Oxyhydroxide (CoOOH) by Oxidation and Adsorption Mechanism. *Appl Catal B-Environ*, 2020, 279: 119404
3. Chuanhui Zhang*, Haijie Cao, Chao Wang, Maoxia He, Wangcheng Zhan, Yanglong Guo*. Catalytic mechanism and pathways of 1, 2-dichloropropane oxidation over LaMnO₃ perovskite: An experimental and DFT study. *J Hazard Mater*, 2021, 402: 123473
4. Fengying Huang, Dongsheng Ye, Xiaohan Guo, Wangcheng Zhan*, Yun Guo, Li Wang, Yunsong Wang, Yanglong Guo*. Effect of ceria morphology on the performance of MnOx/CeO₂ catalysts in catalytic combustion of N, N-dimethylformamide. *Catal Sci Technol*, 2020, 10(8), 2473-2483
5. Yu Sun, Pascal Cop, Igor Djerdj, Xiaohan Guo, Tim Weber, Omeir Khalid, Yanglong Guo*, Bernd M. Smarsly*, Herbert Over*. CeO₂ Wetting Layer on ZrO₂ Particle with Sharp Solid Interface as Highly Active and Stable Catalyst for HCl Oxidation Reaction. *ACS Catal*, 2019, 9(12): 10680-10693
6. Wenchao Hua, Chuanhui Zhang, Yanglong Guo*, Guangtao Chai, Chao Wang, Yun Guo, Li Wang, Yunsong Wang, Wangcheng Zhan*. An efficient SnMn_{1-y}O_x composite oxide catalyst for catalytic combustion of vinyl chloride emissions. *Appl Catal B-Environ*, 2019, 255: 117748
7. Chenwei Li, Yu Sun, Franziska Hess, Igor Djerdj, Joachim Sann, Pascal Voepel, Pascal Cop, Yanglong Guo*, Bernd M. Smarsly*, Herbert Over*. Catalytic HCl oxidation reaction: Stabilizing effect of Zr-doping on CeO₂ nano-rods. *Appl Catal B-Environ*, 2018, 239: 628-635
8. Chenwei Li, Franziska Hess, Igor Djerdj, Guangtao Chai, Yu Sun, Yanglong Guo*, Bernd M. Smarsly*, Herbert Over*. The stabilizing effect of water and high reaction temperatures on the CeO₂-catalyst in the harsh HCl oxidation reaction. *J Catal*, 2018, 357: 257-262
9. Aiyong Wang, Yilin Wang, Eric D. Walter, Ravi K. Kukkadapu, Yanglong Guo*, Guanzhong Lu, Robert S. Weber, Yong Wang, Charles H.F. Peden, Feng Gao*. Catalytic N₂O decomposition and reduction by NH₃ over Fe/Beta and Fe/SSZ-13 catalysts. *J Catal*, 2018, 358: 199-210
10. Chao Wang, Chengcheng Tian, Yanglong Guo*, Zhendong Zhang, Wenchao Hua, Wangcheng Zhan, Yun Guo, Li Wang, Guanzhong Lu*. Ruthenium oxides supported on heterostructured CoPO-MCF materials for catalytic oxidation of vinyl chloride emissions. *J Hazard Mater*, 2018, 342: 290-296
11. Chenwei Li, Yu Sun, Igor Djerdj, Pascal Voepel, Carl-Christian Sack, Tobias Weller, Ruediger Ellinghaus, Joachim Sann, Yanglong Guo*, Bernd M. Smarsly*, Herbert Over*. Shape-Controlled CeO₂ Nanoparticles: Stability and Activity in the Catalyzed HCl Oxidation Reaction. *ACS Catal*, 2017, 7(10): 6453-6463
12. Chao Wang, Chuanhui Zhang, Wenchao Hua, Yanglong Guo*, Guanzhong Lu, Sonia Gil, Anne Giroir-Fendler*. Catalytic oxidation of vinyl chloride emissions over Co-Ce composite oxide catalysts. *Chem Eng J*, 2017, 315: 392-402
13. Aiyong Wang, Yanglong Guo*, Feng Gao*, Charles H.F. Peden. Ambient-temperature NO oxidation over amorphous CrOx-ZrO₂ mixed oxide catalysts: Significant promoting effect of ZrO₂. *Appl Catal B-Environ*, 2017, 202: 706-714
14. Chuanhui Zhang, Chao Wang, Sonia Gil, Antoinette Boreave, Laurence Retailleau, Yanglong Guo*, Jose Luis Valverde, Anne Giroir-Fendler*. Catalytic oxidation of 1, 2-dichloropropane over supported LaMnOx oxides catalysts. *Appl Catal B-Environ*, 2017, 201: 552-560
15. Chuanhui Zhang, Chao Wang, Wenchao Hua, Yanglong Guo*, Guanzhong Lu, Sonia Gil, Anne Giroir-Fendler*. Relationship between catalytic deactivation and physicochemical properties of LaMnO₃ perovskite catalyst during catalytic oxidation of vinyl chloride. *Appl Catal B-Environ*, 2016, 186: 173-183
16. Kanka Feng, Chenwei Li, Yanglong Guo*, Wangcheng Zhan, Binquan Ma, Binwu Chen, Maoquan Yuan, Guanzhong Lu*. An efficient Cu-K-La/γ-Al₂O₃ catalyst for catalytic oxidation of hydrogen chloride to chlorine. *Appl Catal B-Environ*, 2015, 164: 483-487