

工业催化原理 Industrial Catalysis

● 教师介绍 Faculty



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Research Field: Air pollution catalytic control

Education

September, 1996 – October, 2001:

Dalian University of Technology & Pohang University of Science & Technology (POSTECH), South Korea

PhD in Environmental Engineering

September, 1990 – August, 1994:

Tianjin University, Tianjin, China

BS in Applied Chemistry

Work Experience

March, 2008 - present: Professor

College of Chemical Engineering, Beijing University of Chemical Technology

October, 2006 – February, 2008: Research Associate

College of Chemical Engineering, Laval University, Canada

April, 2001 – August, 2002: Postdoctoral Fellow

College of Chemical Engineering, Laval University, Canada

November, 2001 – March, 2001: Assistant Professor

Research Center for Eco-Environmental Science, Chinese Academy of Sciences, Beijing, China

September, 1994 – August, 1996: Assistant Engineer

Fushun Petrochemical Design Institute

Representative Publications

1. S. Liu, R. Zhang (张润铎)*, P. Li, H. Chen, Y. Wei*, Z. Wang, X. Liang, Morphology effect of diverse ceria with active tungsten species on NH₃-SCR behaviors, *Catal.*

Today, (2019) <https://doi.org/10.1016/j.cattod.2019.02.004>, (IF=4.667)

2. Y. Huang, P. Li, R. Zhang (张润铎)*, Y. Wei*, Efficiency of phosphotungstic acid modified Mn-based catalysts to promote activity and N₂ formation for selective catalytic reduction of NO with ammonia, *Int. J. Chem. React. Eng.*, (2019) <https://doi.org/10.1515/ijcre.2018.0057>.
3. M. Wang, L. Zhang, K. Guo, Y. Lin, X. Meng, P. Huang, Y. Wei*, R. Zhang (张润铎)*, Ionothermal synthesis of germanosilicate zeolites constructed with double-four-ring structure building units in the presence of organic base, *Chem. An Asia J.*, 14 (2019) 621–626.
4. X. Li, J. Ma*, C. Zhang, R. Zhang (张润铎), H. he, Facile synthesis of Ag-modified manganese oxide for effective catalytic ozone decomposition, *J. Environ. Sci.* (2019) <https://doi.org/10.1016/j.jes.2018.12.008>.
5. N. Liu, D. Shi, R. Zhang (张润铎)*, Y. Li, B. Chen, Highly selective catalytic combustion of acrylonitrile towards nitrogen over Cu-modified zeolites, *Catal. Today*, (2019) <https://doi.org/10.1016/j.cattod.2018.04.054>, (IF=4.667)
6. H. Wang, R. Xu, Y. Jin, R. Zhang (张润铎)*, Zeolite structure effects on Cu active center, SCR performance and stability of Cu-zeolite catalysts, *Catal. Today*, (2019) <https://doi.org/10.1016/j.cattod.2018.04.035>, (IF=4.667)
7. X Li, J. Ma*, L. Yang, G. He*, C. Zhang*, R. Zhang (张润铎), H. He, Oxygen vacancies induced by transition metal doping in γ -MnO₂ for highly efficient ozone decomposition, *Environ. Sci. Technol.*, 52 (2018) 12685-12696.
8. B. Peng, C. Feng, S. Liu, R. Zhang (张润铎)*, Synthesis of CuO catalyst derived from HKUST-1 temple for the low-temperature NH₃-SCR process, *Catal. Today*, 314 (2018) 122-128, (IF=4.667)
9. N. Liu, X. Yuan, R. Zhang (张润铎)*, Y. Li, B. Chen, Mechanistic insight into selective catalytic combustion of HCN over Cu-BEA: influence of different active center structures, *Phys. Chem. Chem. Phys.*, 19 (2017) 23960-23970 (IF=3.906)
10. J. A. H. Dreyer*, P. Li, L. Zhang, G. K. Beh, R. Zhang (张润铎)*, P. H.-L. Sit, W. Y. Teoh, Influence of the oxide support reducibility on the CO₂ methanation over Ru-based catalysts, *Appl. Catal. B: Environ.*, 219 (2017) 715-726 (IF=11.698).
11. P. Li, R. Zhang (张润铎)*, N. Liu, S. Royer, Efficiency of Cu and Pd substitution in Fe-based perovskites to promote N₂ formation during NH₃ selective catalytic oxidation (NH₃-SCO), *Appl. Catal. B: Environ.*, 203 (2017) 174-188 (IF=11.698).
12. P. Li, R. Zhang (张润铎)*, X. Wang, S. Liu, N. Liu, B. Chen, New evidence on the correlation between lattice fringe with catalytic performance for suprafacial CO and intrafacial CH₄ oxidations over Co₃O₄ by isotopic ¹⁸O₂ exchange, *Mol. Catal.*, 437 (2017) 26-36 (IF=4.211)
13. N. Liu, X. Yuan, B. Chen, Y. Li, R. Zhang (张润铎)*, Selective Catalytic Combustion of Hydrogen Cyanide over Metal Modified Zeolite Catalysts: from Experiment to Theory, *Catal. Today*, 297 (2017) 201-210 (IF=4.667)
14. N. Liu, X. Yuan, R. Zhang (张润铎)*, R. Xu, Y. L, Mechanistic insight into selective catalytic combustion of acrylonitrile (C₂H₃CN): NCO formation and its further transformation towards N₂, *Phys. Chem. Chem. Phys.*, 19 (2017) 7971-7979 (IF=3.906)
15. Y. He, S. Dui, J. Li, R. Zhang (张润铎), X. Liang, B. Chen, Mesoporous Au/CeO₂ catalysts self-assembled by monodispersed CeO₂ nanoparticles and nanocubes and