



Department: School of Resources and Environmental Engineering

Professional field: Environmental catalysis and pollution control

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Profile

Education

PhD, Applied Chemistry, ECUST, China, 2013.

BS, Chemical engineering and technology, Southeast University, China, 2007.

Academic Experience

Associate professor, School of Resources and Environmental Engineering, ECUST, China, 2016-present.

Postdoctor/Lecturer, School of Resources and Environmental Engineering, ECUST, China, 2013-2016.

Visiting scholar, Department of Chemistry, Northwestern University, USA, 2010-2012.

Current Membership in Professional Organizations

Member of Chinese Chemical Society (CCS)

Member of American Chemical Society (ACS)

Editorial board member of SCI journal "Research on Chemical Intermediates"

Honors and Awards

2014 "Pujiang Scholar" honored by Shanghai Science and Technology Commission.

2016: Excellent Young Teacher Award, School of Resources and Environmental Engineering, ECUST

2019: Selected into Young Talents Cultivation Plan of ECUST

Research Field

1. Application of advanced oxidation technology in water pollution and air pollution control
2. Development of functional nanomaterials for environmental application

Research results and selected published papers

- (1) Liang Zhou, Zhihang Liu, Zhipeng Guan, Baozhu Tian, Lingzhi Wang, Yi Zhou, Yanbo Zhou, Juying Lei*, Jinlong Zhang, Yongdi Liu. 0D/2D plasmonic Cu₂-xS/g-C₃N₄ nanosheets harnessing UV-vis-NIR broad spectrum for photocatalytic degradation of antibiotic pollutant. Applied Catalysis B: Environmental, 2020, 263, 118326. (IF: 14.229)
- (2) Liang Zhou, Jianrui Feng, Bocheng Qiu, Yi Zhou, Juying Lei*, Mingyang Xing, Lingzhi Wang, Yanbo Zhou, Yongdi Liu*, Jinlong Zhang*. Ultrathin g-C₃N₄ nanosheet with Hierarchical Pores and Desirable Energy Band for Highly Efficient H₂O₂ Production. Applied Catalysis B: Environmental, 2019, DOI: <https://doi.org/10.1016/j.apcatb.2019.118396> (IF: 14.229)
- (3) Zhenying Jiang, Lingzhi Wang, Juying Lei*, Yongdi Liu, Jinlong Zhang*. Photo-Fenton degradation of phenol by CdS/rGO/Fe²⁺ at natural pH with in situ-generated H₂O₂. Applied Catalysis B: Environmental 2019, 241, 367–374. (IF: 14.229)
- (4) Liang Zhou, Juying Lei*, Lingzhi Wang, Yongdi Liu*, Jinlong Zhang. Highly efficient photo-Fenton degradation of methyl orange facilitated by slow light effect and hierarchical porous structure of Fe₂O₃-SiO₂ photonic crystals. Applied Catalysis B: Environmental, 2018, 237, 1160-1167. (IF: 14.229)
- (5) Fenghui Liu, Jie Yu, Guangyuan Tu, Ling Qu, Jiacheng Xiao, Yongdi Liu, Lingzhi Wang, Juying Lei*, Jinlong Zhang*. Carbon nitride coupled Ti-SBA15 catalyst for visible-light-driven photocatalytic reduction of Cr (VI) and the synergistic oxidation of phenol. Applied Catalysis B: Environmental, 2017, 201, 1-11. (IF: 14.229)
- (6) Juying Lei, Lingzhi Wang*, Jinlong Zhang* □ Superbright Multifluorescent Core-shell Mesoporous Nanospheres as Trackable Transport Carrier for Drug □ ACS Nano 2011, 5(5), 3447-3455. (IF: 13.903)
- (7) Zhichang Liu#, Juying Lei#, Marco Frascioni, Xiaohu Li, Dennis Cao, Zhixue Zhu, Severin T. Schneebeli, George C. Schatz, J. Fraser Stoddart*. A Square □ Planar Tetracoordinate Oxygen □ Containing Ti₄O₁₇ Cluster Stabilized by Two 1, 1' □ Ferrocenedicarboxylate Ligands. Angewandte Chemie International Edition. 2014, 53(35), 9193–9197. (IF: 12.257)
- (8) Juying Lei, Lingang Yang, Deli Lu, Xuefeng Yan, Chen Cheng, Yongdi Liu, Lingzhi Wang*, Jinlong Zhang*. Carbon Dot-Incorporated PMO Nanoparticles as Versatile Platforms for the Design of Ratiometric Sensors, Multichannel Traceable Drug Delivery Vehicles, and Efficient Photocatalysts. Advanced Optical Materials, 2015, 3(1), 57-63. (IF: 7.125)
- (9) Yunhao Tian, Liang Zhou, Qiaohong Zhu, Juying Lei*, Lingzhi Wang, Jinlong Zhang*, Yongdi Liu*. Hierarchical macro-mesoporous g-C₃N₄ with an inverse opal structure and vacancies for high-efficiency solar energy conversion and environmental remediation. Nanoscale, 2019, 11, 20638-20647. (IF: 6.97)
- (10) Juying Lei, Bin Chen, Weijia Lv, Liang Zhou, Lingzhi Wang, Yongdi Liu*, Jinlong Zhang*. Robust photocatalytic H₂O₂ production over inverse opal g-C₃N₄ with carbon vacancy under visible light. ACS Sustainable Chemistry & Engineering, 2019, 7, 19, 16467-16473. (IF: 6.97)
- (11) Juying Lei, Lingzhi Wang* and Jinlong Zhang*; Ratiometric pH sensor based on mesoporous silica nanoparticles and Förster resonance energy transfer; Chemical Communication. 2010, 46(44), 8445-8447. (IF: 6.164)
- (12) Liang Zhou, Yunhao Tian, Juying Lei*, Lingzhi Wang, Yongdi Liu*, Jinlong Zhang*. Self-modification of g-C₃N₄ with its quantum dots for enhanced photocatalytic activity. Catalysis Science & Technology, 2018, 8, 2617-2623. (IF: 5.726)
- (13) Weijia Lv, Zhihang Liu, Jinjing Lan, Ziyu Liu, Wenxin Mi, Juying Lei, Lingzhi Wang, Yongdi Liu*, Jinlong Zhang*. Visible-light-induced reduction of hexavalent chromium utilizing cobalt phosphate (Co-Pi) sensitized inverse opal TiO₂ as a photocatalyst. 2017, Catalysis Science & Technology. 2017, 7, 5687-5693. (IF: 5.726)