



个人简介

吕树光，1965 年生，华东理工大学国家环境保护化工过程环境风险评价与控制重点实验室教授 / 博导。2000 年毕业于日本山口大学环境与生态工学专业，获工学博士学位。主要研究方向为污染场地和地下水修复。任《环境污染与防治》和“Frontiers of Environmental Science & Engineering”编委。近五年主持完成了国家自然科学基金面上项目、环保部公益性行业科研专项 2 项。“工业场地有机物污染地下水环境修复与风险控制新技术”获 2014 年度上海市科学技术二等奖。发表论文 150 余篇（其中第一 / 通讯作者 120 余篇，近五年 48 篇），以第一发明人申请国家发明专利 6 项，其中已获授权 2 项。

研究方向

污染场地和地下水修复

研究成果及主要发表文章

1. Wenchao Jiang, Dionysios D. Dionysiou*, Minghao Kong, Zhen Liu, Qian Sui, Shuguang Lyu*. Utilization of formic acid in nanoscale zero valent iron-catalyzed Fenton system for carbon tetrachloride degradation. Chemical Engineering Journal, 2020, 380: 122537.
2. Wenchao Jiang, Ping Tang, Shuguang Lyu*, Mark L. Brusseau, Yunfei Xue, Xiang Zhang, Zhaofu Qiu, Qian Sui*. Enhanced redox degradation of chlorinated hydrocarbons by the Fe(II)-catalyzed calcium peroxide system in the presence of formic acid and citric acid. Journal of Hazardous Materials, 2019, 368: 506-513.
3. Ping Tang, Wenchao Jiang, Shuguang Lyu*, Mark L. Brusseau, Yunfei Xue, Zhaofu Qiu, Qian Sui*. Mechanism of carbon tetrachloride reduction in ferrous ion activated calcium peroxide system in the presence of methanol. Chemical Engineering Journal, 2019, 362: 243-250.
4. Yunfei Xue, Qian Sui*, Mark L. Brusseau, Wei Zhou, Zhaofu Qiu, Shuguang Lyu*. Insight into CaO₂-based Fenton and Fenton-like systems: strategy for CaO₂-based oxidation of organic contaminants. Chemical Engineering Journal, 2019, 361: 919-928.
5. Yong Sun, Shuguang Lyu*, Mark L. Brusseau, Ping Tang, Wenchao Jiang, Mengbin Gu, Ming Li, Yanchen Lyu, Zhaofu Qiu, Qian Sui*. Degradation of trichloroethylene in aqueous solution by nanoscale calcium peroxide in the Fe(II)-based catalytic environments, Separation and Purification Technology. 2019, 226: 13-21.
6. Usman Farooq, Muhammad Danish, Shuguang Lyu*, Mark L. Brusseau, Mengbin Gu, Waqas Qamar Zaman, Zhaofu Qiu, Qian Sui. The impact of surface properties and dominant ions on the effectiveness of G-nZVI heterogeneous catalyst for environmental remediation. Science of the Total Environment, 2019, 651: 1182-1188.
7. Mengbin Gu, Qian Sui, Usman Farooq, Xiang Zhang, Zhaofu Qiu, Shuguang Lyu*. Degradation of phenanthrene in sulfate radical based oxidative environment by nZVI-PDA functionalized rGO catalyst. Chemical Engineering Journal, 2018, 354: 541-552.
8. Yunfei Xue, Qian Sui, Mark L. Brusseau, Xiang Zhang, Zhaofu Qiu, Shuguang Lyu*. Insight on the generation of reactive oxygen species in the CaO₂/Fe(II) Fenton system and the hydroxyl radical advancing strategy. Chemical Engineering Journal, 2018, 353: 657-655.
9. Mengbin Gu, Qian Sui, Usman Farooq, Xiang Zhang, Zhaofu Qiu, Shuguang Lyu*. Enhanced degradation of trichloroethylene in oxidative environment by nZVI/PDA functionalized rGO catalyst. Journal of Hazardous Materials, 2018, 359: 157-165.
10. Yunfei Xue, Ljiljana Rajic, Long Chen, Shuguang Lyu*, Akram N. Alshawabkeh. Electrolytic control of hydrogen peroxide release from calcium peroxide in aqueous solution. Electrochemistry Communications, 2018, 93: 81-85.
11. Ping Tang, Wenchao Jiang, Shuguang Lyu*, Zhaofu Qiu, Qian Sui. Ethanol enhanced carbon tetrachloride degradation in Fe(II) activated calcium peroxide system. Separation and Purification Technology, 2018, 205: 105-112.
12. Usman Farooq, Muhammad Danish, Shuguang Lyu*, Muhammad Naqvi, Zhaofu Qiu, Qian Sui. A step forward towards synthesizing a stable and regeneratable nanocomposite for remediation of trichloroethene. Chemical Engineering Journal, 2018, 347: 660-668.
13. Wenchao Jiang, Ping Tang, Shuguang Lyu*, Yunfei Xue, Xiang Zhang, Zhaofu Qiu, Qian Sui. Comparative studies of H₂O₂/Fe(II)/formic acid, sodium percarbonate/Fe(II)/formic acid and calcium peroxide/Fe(II)/formic acid processes for degradation performance of carbon tetrachloride. Chemical Engineering Journal, 2018, 344: 453-461.
14. Mengbin Gu, Usman Farooq, Shuguang Lyu*, Xiang Zhang, Zhaofu Qiu, Qian Sui. Degradation of trichloroethylene in aqueous solution by rGO supported nZVI catalyst under several oxic environments. Journal of Hazardous Materials, 2018, 349: 35-44.
15. Sixia Yu, Xiaogang Gu, Shuguang Lyu*, Yunfei Xue, Xiang Zhang, Minhui Xu, Zhaofu Qiu, Qian Sui. Degradation of phenanthrene in aqueous solution by a persulfate/percarbonate system activated with CA chelated-Fe(II). Chemical Engineering Journal, 2018, 333: 122-131.
16. Yunfei Xue, Shuguang Lyu*, Xiaori Fu, Virender K. Sharma, Itza Mendoza-Sanchez, Zhaofu Qiu, Qian Sui. Simultaneous removal of benzene, toluene, ethylbenzene and xylene (BTEX) by CaO₂ based Fenton system: Enhanced degradation by chelating agents. Chemical Engineering Journal, 2018, 331: 255-264.
17. Shuguang Lyu*, Xiang Zhang, Yunfei Xue. Application of calcium peroxide in water and soil treatment: A review. Journal of Hazardous Materials, 2017, 337: 163-177.