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环境化学专业

### 联系方式

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### 教育背景

博士（化 学），慕尼黑工业大学技术化学系，2002  
硕士（物理化学），南京大学化学化工学院，1992  
学士（物理化学），南京大学化学化工学院，1989

### 工作经历

2006-至今 南京大学环境学院，博士生导师  
2005-至今 南京大学环境学院，教授  
2003-2005 南京大学环境学院，副教授  
1994-1999 南京大学环境学院，讲师  
1992-1994 南京大学环境学院助教  
2004.12-2005.3 德国慕尼黑工业大学高级访问学者。  
2003.8-2003.11 西藏大学理学院，南京大学—西藏大学对口援藏教学  
1998-1999 英国纽卡斯尔大学土木工程系

### 主要研究方向

环境化学：环境催化、环境功能材料

### 近年主要研究项目

- 腐殖质在表面官能化的有序中孔SiO<sub>2</sub>上的吸附机制研究，国家自然科学基金项目，主持
- 典型有机污染物和硝酸盐的光催化同步去除机制研究，国家自然科学基金项目，2007-2009，主持
- 土壤中持久性有机有毒污染物的迁移转化规律及对地下水的影响，国家自然科学基金重点项目，2007-2010，主研
- 农药工业园区资源循环利用关键技术开发及应用研究，国家科技支撑计划课题，2006-2010，主研

### 获奖及个人学术荣誉

- 2008，新世纪人才计划

### 代表论文

- Yuxiang Han, Juan Zhou, Wenjuan Wang, Haiqin Wan\*, Zhaoyi Xu, Shourong Zheng\*, Dongqiang Zhu, Enhanced selective hydrodechlorination of 1,2-dichloroethane to ethylene on Pt-Ag/TiO<sub>2</sub> catalysts prepared by sequential photodeposition, *Appl. Catal. B: Environ.*, 2012, in press.
- Fang Jiang, Shourong Zheng, Lichao An, Huan Chen, Effect of calcination temperature on the adsorption and photocatalytic activity of hydrothermally synthesized TiO<sub>2</sub> nanotubes, *Applied Surface Science*, 2012, **258**, 7188-7194.
- Jingliang Liu, Enmin Zong, Heyun Fu, Shourong Zheng, Zhaoyi Xu\*, Dongqiang Zhu, Adsorption of aromatic compounds on porous covalent triazine-based framework, *Journal of Colloid and Interface Science* 2012, **372**, 99–107.
- Liyuan Li, Fang Jiang, Jingliang Liu, Haiqin Wan, Yuqiu Wan Shourong Zheng\*, Enhanced photocatalytic reduction of aqueous Pb(II) over Ag loaded TiO<sub>2</sub> with formic acid as hole scavenger, *J. Environ. Sci. Heal. A: Toxic/Hazardous Substances Environ. Engineering*, 2012, **47**, 327-336.
- Yuqiong Tang, Enmin Zong, Haiqin Wan, Zhaoyi Xu, Shourong Zheng, Dongqiang Zhu, Zirconia functionalized SBA-15 as effective adsorbent for phosphate removal, *Micropor. Mesopor. Mater.* 2012, **155**, 192-200.
- Li Li-Yuan, Jiang Fang, Wan Haiqin, Xu Zhaoyi, Zheng Shourong\*, TiO<sub>2</sub> nanosheet: Synthesis and photocatalytic performance for phenol degradation, *Chinese Journal of Inorganic Chemistry*, 2011, **27**, 1041-1046.
- Yun Shao, Zhaoyi Xu, Haiqin Wan\*, Yuqiu Wan, Huan Chen, Shourong Zheng\*, Dongqiang Zhu, Enhanced liquid phase catalytic hydrodechlorination of 2,4-dichlorophenol over mesoporous carbon supported Pd catalysts, *Catal. Commun.* 2011, **12**, 1405-1409.
- Huan Chen, Yun Shao, Zhaoyi Xu, Haiqin Wan, Yuqiu Wan, Shourong Zheng\*, Dongqiang Zhu, Effective catalytic reduction of Cr(VI) over TiO<sub>2</sub> nanotube supported Pd catalysts, *Appl. Catal. B: Environ.*, 2011, **105**, 255-262.

9. Xiaolei Qu, Yingjie Zhang, Hui Li, Shourong Zheng, Dongqiang Zhu\*, Specific Sorption Sites on Montmorillonite Using Nitroaromatic Compounds and Hexafluorobenzene, *Environ. Sci. Technol.* 2011, **45**, 2209–2216.
10. Fengling Liu, Zhaoyi Xu, Haiqin Wan, Yuqiu Wan, Shourong Zheng\*, and Dongqiang Zhu, Enhanced Adsorption of Humic Acids on Ordered Mesoporous Carbon as Compared with Microporous Activated Carbon, *Environmental Toxicology and Chemistry*, 2011, **30**, 793–800.
11. Jiahong Wang, Shourong Zheng, Jingliang Liu, Zhaoyi Xu\*, Tannic acid adsorption on amino-functionalized magnetic mesoporous silica, *Chemical Engineering Journal*, 2010, **165**, 10-16.
12. Ji Liangliang, Chen Wei, Bi Jun, Zheng Shourong, Xu Zhaoyi, Zhu Dongqiang\*, Alvarez Pedro J., Adsorption of tetracycline on single-walled and multi-walled carbon nanotubes as affected by aqueous solution chemistry, *Environmental Toxicology and Chemistry*, 2010, **29**, 2713–2719.
13. Wang Jia-Hong, Zheng Shou-Rong, Liu Feng-Ling, Liu Jing-Liang, Tang Liang, Xu Zhao-Yi\*, Removal of Aqueous Humic Acid by Magnetic Chitosan Microspheres, *Chinese Journal of Inorganic Chemistry*, 2011, **26**, 1761-1767.
14. Liangliang Ji, Yun Shao, Zhaoyi Xu, Shourong Zheng and Dongqiang Zhu\*, Adsorption of Monoaromatic Compounds and Pharmaceutical Antibiotics on Carbon Nanotubes Activated by KOH Etching, *Environ. Sci. Technol.* 2010, **44**, 6429-6436.
15. Jiahong Wang, Shourong Zheng, Yun Shao, Jingliang Liu, Zhaoyi Xu\*, Dongqiang Zhu, Amino-functionalized Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> core-shell magnetic nanomaterial as novel adsorbent for aqueous heavy metals removal, *J. Colloid Interf. Sci.*, 2010, **349**, 293-299.
16. Liyuan Li, Zhaoyi Xu\*, Fengling Liu, Yun Shao, Jiahong Wang, Haiqin Wan, Shourong Zheng\*, Photocatalytic nitrate reduction over Pt-Cu/TiO<sub>2</sub> catalysts with benzene as hole scavenger, *J. Photochem. Photobio. A: Chem.*, 2010, **212**, 113-121.
17. Yun Shao, Zhaoyi Xu, Haiqin Wan, Huan Chen, Fengling Liu, Liyuan Li, Shourong Zheng\*, Influence of ZrO<sub>2</sub> properties on catalytic hydrodechlorination of chlorobenzene over Pd/ZrO<sub>2</sub> catalysts, *Journal of Hazardous Materials B*, 2010, **179**, 135-140.
18. Huan Chen, Zhaoyi Xu, Haiqin Wan, Jianzhong Zheng, Daqiang Yin\*, Shourong Zheng\*, Aqueous bromate reduction by catalytic hydrogenation over Pd/Al<sub>2</sub>O<sub>3</sub> catalysts, *Appl. Catal. B: Environ.*, 2010, **96**, 307-313.
19. Liangliang Ji, Fengling Liu, Zhaoyi Xu, Shourong Zheng\*, Dongqiang Zhu\*, Adsorption of Pharmaceutical Antibiotics on Template-Synthesized Ordered Micro- and Mesoporous Carbons, *Environ. Sci. Technol.*, 2010, **44**, 3116-3122.
20. Qi Tao, Zhaoyi Xu, Jiahong Wang, Fengling Liu, Haiqin Wan, Shourong Zheng\*, Adsorption of humic acid to aminopropyl functionalized SBA-15, *Micropor. Mesopor. Mater.*, 2010, **131**, 177-185.
21. Rongxin Mu, Zhaoyi Xu, Liyuan Li, Yun Shao, Haiqin Wan, Shourong Zheng\*, On the photocatalytic properties of elongated TiO<sub>2</sub> nanoparticles for phenol degradation and Cr(VI) reduction, *Journal of Hazardous Materials B*, 2010, **176**, 495-502.
22. Guangming Liu, Shourong Zheng, Xiaoli Xing, Yifan Li, Daqiang Yin\*, Yongsheng Ding, Weihai Pang, Fe(III)-oxalate complexes mediated photolysis of aqueous alkylphenol ethoxylates under simulated sunlight conditions, *Chemosphere*, 2010, **78**, 402-408.
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27. Zhaoyi Xu, Liqiang Chen, Yun Shao, Daqiang Yin, Shourong Zheng\*, Catalytic hydrogenation of aqueous nitrate over Pd-Cu/ZrO<sub>2</sub> catalysts, *Ind. Eng. Chem. Res.*, 2009, **48**, 8356–8363.
28. Dongqiang Zhu, Hua Zhang, Qi Tao, Zhaoyi Xu, Shourong Zheng\*, Surface Functionalized Mesoporous Silicas as Adsorbents for Aromatic Contaminants in Aqueous Solution, *Environmental Toxicology and Chemistry*, 2009, **28**, 1400-1408.
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## 国家发明专利

1. 郭照冰, 郑正, 郑寿荣, 马建军, 胡文勇, 赵翠萍, 杨凯, 唐登勇, 帖进奎, 一种HZSM-5沸石吸附分离硝基氯苯、硝基酚废水及资源回收的方法 (专利号: ZL 03 1 52996.8)
2. 郭照冰, 郑正, 郑寿荣, 江芳, 唐登勇, 袁守军, 张继彪, 陈立强, 吴文继, 氧化锑修饰的沸石吸附分离硝基氯苯废水及资源回收的方法 (专利号: ZL 2004 10014258.3)
3. 郑正, 郭照冰, 郑寿荣, 江芳, 帖靖喜, 唐登勇, 周培国, 袁守军, 王艳锦, 喻晓, 陈立强, 范杰, 顾春辉, 牟艳艳, 程莹莹, 张继彪, 钟云, 彭小成, 用硅烷化修饰的沸石分离水体中硝基氯苯与资源回收的方法 (专利号: ZL 2004 1 0065685.4)
4. 郑正, 郑寿荣, 江芳, 郭照冰, 袁守军, 陈立强, 范杰, 帖靖喜, 周培国, 唐登勇, 牟艳艳, 张继彪, 用沸石吸附分离硝基甲苯废水及资源回收的方法 (专利号: ZL 200410065686.9)
5. 郑寿荣, 陶琪, 许昭怡, 张利民, 王志良, 夏明芳, 范杰, 邵飞, 张青梅, 季必燕, 一种去除水体中腐植酸类大分子污染物的方法 (公开号: CN101062798A)
6. 焦少俊, 郑寿荣, 张洪昌, 尹大强, 张继彪, 陈良燕, 利用可见光照射降解水中四环素的方法 (公开号: CN101113044A)
7. 焦少俊, 郑寿荣, 张继彪, 尹大强, 张洪昌, 陈良燕, 利用可见光照射降解水中土霉素的方法 (公开号: CN101125692A)
8. 许昭怡, 张青梅, 郑寿荣, 马菲菲, 范杰, 陶琪, 季必燕, 刘凤玲, 李丽媛, 顾浩, 邵飞, 水滑石在去除水中四环素方面的应用 (公开号: CN101157489A)
9. 许昭怡, 顾浩, 郑寿荣, 范杰, 刘凤玲, 李丽媛, 刘景亮, 穆容心, 邢涛, 王家宏, 赵瑞东, 一种分子筛负载的铝氧化物去除水中

氟离子的方法 (专利号: ZL 200710302493.4)

10. 许昭怡, 顾浩, 郑寿荣, 范杰, 刘凤玲, 李丽媛, 刘景亮, 穆容心, 邢涛, 王家宏, 赵瑞东, 一种负载钨的氧化物的氧化铝去除水中氟离子的方法 (专利号: ZL 200810020740.6)
11. 郑寿荣, 刘凤玲, 许昭怡, 吴铎, 李丽媛, 王家宏, 顾浩, 穆容心, 邢涛, 刘景亮, 赵瑞东, 一种吸附法去除水中四环素的方法 (专利号: ZL 200810020992.9)
12. 郑寿荣, 李丽媛, 许昭怡, 刘凤玲, 顾浩, 王家宏, 邵芸, 穆容心, 邢涛, 刘景亮, 赵瑞东, 唐玉琼, 韩玉香, 唐亮, 宗思敏, 一种同时光催化降解苯和硝酸盐的催化剂 (申请号: 200810154962.7, 公开号: CN101385981)
13. 许昭怡, 王家宏, 郑寿荣, 刘凤玲, 李丽媛, 邵芸, 顾浩, 穆容心, 邢涛, 刘景亮, 赵瑞东, 胺基修饰的 $\text{Fe}_3\text{O}_4@ \text{SiO}_2$ 复合微粒处理水体中重金属离子的方法 (专利号: ZL 200810154961.2)
14. 郑寿荣, 陈欢, 许昭怡, 郑建中, 李丽媛, 邵芸, 刘凤玲, 王家宏, 刘景亮, 一种液相催化处理水体中溴酸盐的方法 (申请号: 200910032122.8, 公开号: CN101585573)