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个人简介:

1995年6月, 湖南大学, 化学化工学院, 化工工艺, 学士

2002年12月, 南京工业大学, 制药与生命科学学院, 生物化工, 硕士

2006年6月, 南京大学, 环境学院, 环境工程, 博士

2006年10月-2007年9月, 德国, 卡尔斯鲁厄大学, 水化学研究所, 访问学者

2008年3月起, 在南京师范大学化学与材料科学学院工作, 历任副教授、硕士生导师、教授、博士生导师

至今共发表科学论文70余篇, 其中SCI源期刊论文50余篇, 申请和授权专利10余项。

复杂体系中典型难降解有毒污染物治理新技术研发与应用, 江苏省人民政府科技进步一等奖(10/11), 2015.1.5

难降解有机工业废水治理与毒性减排关键技术及装备, 国家科技进步二等奖(9/10), 2016.1.8

研究方向:

1. 多孔吸附材料研发及其在水污染控制与资源化领域的应用, 包括材料合成、吸附净化原理、关键技术开发等。
2. 针对水体中不同类型的新型有机污染物, 研发新型环境功能材料(树脂、絮凝剂等), 建立对不同污染物净化、分离的新方法, 并根据水质特征优化技术组合, 构建高效净化工艺, 并进行工程应用。

人才培养:

1. 本科生: 近三年, 参与课题组科研训练本科生累计50余人。其中, 2018届本科生张讯通、沈佳淳入选校“英才计划”, 获美国前50高校博士研究生全额奖学金录取; 多人保送或考取985高校或中科院研究生(2017届马瑞雪保送华东师范大学; 2017届于歌保送武汉大学; 2018届董畅保送北京师范大学; 2016届于恩祺考取中科院城市环境研究所; 2018届张苗苗考取四川大学)。

2. 研究生: 2015届张婷婷获省优秀硕士论文; 2016届贾淑颖获校优秀硕士论文; 多人获研究生国家奖学金(张婷婷2014, 张子炜2015, 贾淑颖2016, 王旭增2017, 周夏2018, 姚娜2019)。

科研项目:

1. 太湖水污染治理省级专项资金科研课题, 211190B51802-1子课题, 藻泥和淤泥资源化利用技术集成研发与工程示范。
2. 国家自然科学基金面上项目, 51978341, 基于双转换开关型絮凝剂的絮凝-超滤强化脱除药物及控制膜污染机制, 2020.01-2023.12。
3. 国家自然科学基金面上项目, 51578295, 多孔 $\text{Bi}_2\text{Ti}_2\text{O}_7/\text{TiO}_2$ 异质结催化降解城市污水中复合抗生素的机理研究, 2016.01-2019.12。

4. 江苏省太湖水污染治理专项基金（第八期）技术示范类课题，太湖流域集约化水禽养殖废水氮磷污染控制关键技术研究。
5. 国家自然科学基金面上项目，51278253，树脂吸附畜禽养殖废水中的抗生素和重金属的机理与技术，2013.01-2016.12。
6. 国家自然科学基金面上项目，50978137，不同结构吸附树脂对典型抗生素类有机物的吸附行为与机理，2010.01-2012.12。
7. 国家高技术研究发展计划(863计划)，2009AA06Z315，低浓度用于水溶性有机污染物深度处理技术开发，2010.06-2012.06。
8. 江苏省自然科学基金，SBK20080436，废水中酚类内分泌干扰物的树脂吸附行为及机理研究，2008.10-2011.10。
9. 江苏省第五期333高层次人才培养工程，184080H1022441，基于羧酸系聚合物的畜禽养殖废水复合污染物凝聚吸附原理。

发表论文：

1. Zhen Yang, Tianyang Hou, Jiangya Ma, Bo Yuan, Ziqi Tian, **Weiben Yang***^{**}, Nigel J.D. Graham. Role of moderately hydrophobic chitosan flocculants in the removal of trace antibiotics from water and membrane fouling control. **Water Research**, 2020,177.
2. Na Yao, Chao Li, Jiayan Yu, Qianqian Xu, Shuya Wei, Ziqi Tian, Zhen Yang^{*}, **Weiben Yang***^{*}, Jian Shen. Insight into adsorption of combined antibiotic-heavy metal contaminants on graphene oxide in water. **Separation and Purification Technology**, 2020, 236.
3. Shaopeng Zhang, Xin Jiang, Shikun Cheng, Chang'e Fu, Ziqi Tian, Zhen Yang^{*}, and **Weiben Yang***^{*}. Enhanced scale inhibition against $\text{Ca}_3(\text{PO}_4)_2$ and Fe_2O_3 in water using multi-functional fluorescently-tagged antibacterial scale inhibitors. **Environmental Science: Water Research & Technology**. 2020, 6, 951-962.
4. Bo Bian, Xiuren Hu, Shaopeng Zhang, Chengxu Lv, Zhen Yang^{*}, **Weiben Yang**, Limin Zhang. Pilot-scale composting of typical multiple agricultural wastes: Parameter optimization and mechanisms. **Bioresource Technology**, 2019, 287.
5. Tianyang Hou, Hongwei Du, Zhen Yang^{*}, Ziqi Tian, Shichao Shen, Yaxuan Shi, **Weiben Yang***^{*}, Limin Zhang. Flocculation of different types of combined contaminants of antibiotics and heavy metals by thermo-responsive flocculants with various architectures. **Separation and Purification Technology**, 2019, 223, 123-132.
6. Haojie Qu, Chang'e Fu, **Weiben Yang***, Zhen Yang, Limin Zhang. Preparation, application and water reducing mechanism of a novel fluorescent superplasticizer with improved flow retaining ability and clay tolerance, **Journal of Dispersion Science and Technology**, 2018, 39 (12), 1829-1839.
7. Xia Zhou, Ye Yang, Chao Li, Zhen Yang*, **Weiben Yang***, Ziqi Tian, Limin Zhang, Tao Tao. Environmental-friendly one-step fabrication of tertiary amine-functionalized adsorption resins for removal of benzophenone-4 from water, **Journal of Cleaner Production**, 2018, 203, 655-663.
8. Na Yao, Xuntong Zhang, Zhen Yang*, **Weiben Yang***, Ziqi Tian, Limin Zhang. Norfloxacin and Bisphenol-A Removal Using Temperature-Switchable Graphene Oxide, **ACS Applied Materials & Interfaces**, 2018, 10 (34), 29083–29091.
9. Bo Bian, Limin Zhang*, Qin Zhang, Shaopeng Zhang, Zhen Yang*, **Weiben Yang***. Coupled heating/acidification pretreatment of chemical sludge for dewatering by using waste sulfuric acid at low temperature, **Chemosphere**, 2018, 205, 260-266.
10. Jiachun Shen, Xuzeng Wang, Limin Zhang, Zhen Yang*, **Weiben Yang***, Ziqi Tian, Jianqiang Chen*, Tao Tao. Size-selective adsorption of methyl orange using a novel nano-composite by encapsulating HKUST-1 in hyper-crosslinked polystyrene networks. **Journal of Cleaner Production**, 2018, 184, 949-958.
11. Hongwei Du, Zhen Yang*, Ziqi Tian, Menglu Huang, **Weiben Yang***, Limin Zhang, Aimin Li. Enhanced removal of trace antibiotics from turbid water in the coexistence of natural organic matters using phenylalanine-modified-chitosan flocculants: Effect of flocculants' molecular architectures. **Chemical Engineering Journal**, 2018, 333, 310-319.
12. Xia Zhou, Chang Dong, Zhen Yang*, Ziqi Tian, Lishi Lu, **Weiben Yang***, Yuping Wang, Limin Zhang, Aimin Li, Jianqiang Chen. Enhanced adsorption of pharmaceuticals onto core-brush shaped aromatic rings-functionalized chitosan magnetic composite particles: Effects of structural characteristics of both pharmaceuticals and brushes. **Journal of Cleaner Production**, 2018, 172, 1025-1034.
13. Shaopeng Zhang, Haojie Qu, Zhen Yang*, Chang'e Fu, Ziqi Tian, **Weiben Yang***. Scale inhibition performance and mechanism of sulfamic/amino acids modified polyaspartic acid against calcium sulfate. **Desalination**. 2017, 419, 152-159.
14. Xuzeng Wang, Ning Zhuo, Chang'e Fu, Ziqi Tian, Haige Li, Jialei Zhang, Wei Wu, Zhen Yang*, **Weiben Yang***. Enhanced selective adsorption of benzotriazole onto nanosized zeolitic imidazolate frameworks confined in polystyrene anion exchanger. **Chemical Engineering Journal**, 2017, 328, 816-824.
15. Kexin Ren, Hongwei Du, Zhen Yang*, Ziqi Tian, Xuntong Zhang, **Weiben Yang***, Jianqiang Chen. Separation and Sequential Recovery of Tetracycline and Cu (II) from Water Using Reusable Thermoresponsive Chitosan-Based Flocculant. **ACS Applied Materials & Interfaces**, 2017, 9 (11), 10266–10275.
16. Ning Zhuo, Yaqian Lan, **Weiben Yang***, Zhen Yang*, Xiaomin Li, Xia Zhou, Yang Liu, Jiachun Shen, Xuntong Zhang. Adsorption of three selected pharmaceuticals and personal care products (PPCPs) onto MIL-101(Cr)/natural polymer composite beads, **Separation and Purification Technology**, 2017, 177, 272-280.
17. Shuying Jia, Zhen Yang*, Kexin Ren, Ziqi Tian, Chang Dong, Ruixue Ma, Ge Yu, **Weiben Yang***. Removal of antibiotics from water in the coexistence of suspended particles and natural organic matters using amino-acid-modified-chitosan flocculants: A combined experimental and theoretical study. **Journal of Hazardous Materials**, 2016, 317, 593-601.
18. Shaopeng Zhang, Yayi Dong, Zhen Yang*, **Weiben Yang***, Jiaqing Wu, Chang Dong. Adsorption of pharmaceuticals on chitosan-based magnetic composite particles with core-brush topology. **Chemical Engineering Journal**, 2016, 304, 325-334.
19. Shuying Jia, Zhen Yang*, **Weiben Yang***, Tingting Zhang, Shaopeng Zhang, Xinzhe Yang, Yayi Dong, Jiaqian Wu, Yuping Wang, Removal of Cu(II) and tetracycline using an aromatic rings-functionalized chitosan-based flocculant: Enhanced interaction between the flocculant and the antibiotic, **Chemical Engineering Journal**, 2016, 283, 495-503.
20. Zhen Yang, Kexin Ren, Eric Guibal, Shuying Jia, Jiachun Shen, Xuntong Zhang, **Weiben Yang***, Removal of trace nonylphenol from water in the coexistence of suspended inorganic particles and NOMs by using a cellulose-based flocculant, **Chemosphere**, 2016, 161, 482-490.

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22. Xuntong Zhang, Jiachun Shen, Ning Zhuo, Ziqi Tian, Peiran Xu, Zhen Yang^{*}, and **Weiben Yang***. Interactions between Antibiotics and Graphene-Based Materials in Water: A Comparative Experimental and Theoretical Investigation. **ACS Applied Materials & Interfaces**, 2016, 8, 24273-24280.
23. Zhen Yang, Shuying Jia, Tingting Zhang, Ning Zhuo, Yayi Dong, **Weiben Yang***, Yuping Wang, How heavy metals impact on flocculation of combined pollution of heavy metals-antibiotics: A comparative study, **Separation and Purification Technology**, 2015, 149, 398-406.
24. Zhen Yang, Shuying Jia, Ning Zhuo, **Weiben Yang***, Yuping Wang, Flocculation of copper (II) and tetracycline from water using a novel pH- and temperature-responsive flocculants, **Chemosphere**, 2015, 141, 112-119.
25. Miao Jiang, **Weiben Yang***, Ziwei Zhang, Zhen Yang, Yuping Wang, Adsorption of three pharmaceuticals on two magnetic ion-exchange resins, **Journal of Environmental Sciences**, 2015, 31, 226-234.
26. Yang Zhen, Zhuo Ning, Zhang Shaopeng, Dong Yayi, Zhang Xuntong, Shen Jiachun, **Yang Weiben***, Wang Yuping, and Chen Jianqiang. A pH- and Temperature-Responsive Magnetic Composite Adsorbent for Targeted Removal of Nonylphenol. **ACS Applied Materials & Interfaces**, 2015, 7, 24446-24457.
27. Tingting Zhang, Mingming Wang, **Weiben Yang***, Zhen Yang*, Yuping Wang, Zhenggui Gu, Synergistic Removal of Copper(II) and Tetracycline from Water Using an Environmentally Friendly Chitosan-Based Flocculant, **Industrial & Engineering Chemistry Research**, 2014, 53, 14913-14920.
28. Yipin Lu, Miao Jiang, Chuanwei Wang, Yuping Wang, **Weiben Yang***, Impact of molecular size on two antibiotics adsorption by porous resins, **Journal of the Taiwan Institute of Chemical Engineers**, 2014, 45, 955-961.
29. Yipin Lu, Miao Jiang, Chuanwei Wang, Yuping Wang, **Weiben Yang***, Effects of Matrix and Functional Groups on Tylosin Adsorption onto Resins and Carbon Nanotubes, **Water, Air, & Soil Pollution**, 2013, 224, 1536-1547.
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31. **Weiben Yang***, Yipin Lu, Fangfang Zheng, Xiaoxu Xue, Na Li, Daming Liu, Adsorption behavior and mechanisms of norfloxacin onto porous resins and carbon nanotube, **Chemical Engineering Journal**, 2012, 179, 112-118.
32. Jun Fan, **Weiben Yang** & Aimin Li. Surface and Lateral Interactions of Nonylphenol Nonionic Surfactants with Porous Resin. **Separation Science and Technology**. 2012, 47, 494-501.
33. **Weiben Yang***, Fangfang Zheng, Yipin Lu, Xiaoxu Xue, Na Li, Adsorption Interaction of Tetracyclines with Porous Synthetic Resins, **Industrial & Engineering Chemistry Research**, 2011, 50, 13892-13898.
34. **Weiben Yang***, Fangfang Zheng, Xiaoxu Xue, Yipin Lu, Investigation into adsorption mechanisms of sulfonamides onto porous adsorbents, **Journal of colloid and interface science**, 2011, 362, 503-509.
35. Jun Fan, **Weiben Yang***, Aimin Li^{*}. Adsorption of phenol, bisphenol A and nonylphenol ethoxylates onto hypercrosslinked and aminated adsorbents. **Reactive & Functional Polymers**, 2011, 71, 994-1000.
36. **Weiben Yang**, Xiaoxu Xue, Fangfang Zheng & Xiaodi Yang. Importance of Surface Area and Pore Size Distribution of Resin for Organic Toxicants Adsorption. **Separation Science and Technology**, 2011, 46, 1321-1328.

申请与授权专利

1. Yang W, Yang Z, Zhuo N, et al. Synthesis and Application of MOFs/natural Polymers Composite Beads Adsorbents, US10537873B2, 美国专利, 授权时间: 2020.1.22
2. 杨维本, 杨朕, 朱炜, 黄晓华, 张少鹏, 张毅. 一种载MOF树脂复合吸附剂及其制备方法和应用. 国家发明专利. 申请号:201910841698.2.
3. 杨维本, 杨朕, 朱炜, 黄晓华, 张少鹏, 张毅. 一种载纳米钼酸盐树脂复合吸附剂、制备方法及应用. 国家发明专利. 申请号:201910604758.9.
4. 杨朕, 杨维本, 陈嘉豪, 王旭增, 蒋欣. 一种聚苯乙烯纳米零价铁复合材料及其制备方法和应用. 国家发明专利. 申请号:201910078534.9.
5. 杨朕, 杨维本, 王亚东, 侯天阳, 沈健, 赵丽娜, 陈静怡. 一种去除复合污染地表水中痕量抗生素的一体化反应器及其去除方法. 国家发明专利. 申请号:201910421618.8.
6. 杨朕, 杨维本, 侯天阳, 王亚东, 赵丽娜, 刘越, 沈健. 一种季磷盐改性淀粉絮凝剂及其制备方法和应用. 国家发明专利. 申请号:201910437393.5.
7. 杨朕, 杨维本, 周夏, 王亚东. 一种用于去除异味的异味捕捉剂的制备方法和应用. 国家发明专利. 申请号:201910338241.X.
8. 杨朕, 杨维本, 胡宇翀, 李超, 蒋欣. MOFs高分子复合电极的制备方法、复合电极及其使用方法. 国家发明专利. 申请号:201811065918.9.
9. 杨维本, 张少鹏, 杨朕, 符嫦娥, 侯天阳, 耿星月. 一种荧光示踪型阻垢剂及其制备方法和应用. 国家发明专利. 申请号:201810132993.6.
10. 杨朕, 周夏, 杨维本, 姚娜, 朱潇逸, 王悦, 王琳. 一种具有板-刷结构的改性磁性氧化石墨烯吸附剂及其制备方法和应用. 国家发明专利. 申请号:201810132723.5.
11. 杨朕, 杜红薇, 杨维本, 沈世超, 耿星月. 一种疏水改性壳聚糖絮凝剂及其制备方法和应用. 国家发明专利. 申请号:201810113379.5.
12. 杨朕, 杨维本, 张少鹏, 蒋欣, 夏霄阳. 改性壳聚糖-金属氢氧化物复合球吸附剂及其制备方法和应用. 国家发明专利. 申请号:201811121130.5.
13. 杨朕, 杨维本, 王旭增, 卓宁, 沈佳淳, 朱潇逸. 一种磁性共价有机框架材料及其制备方法和应用. 国家发明专利. 申请号:201710462740.0.
14. 杨朕, 杨维本, 胡宇翀, 张少鹏. 一种甲醛捕捉剂及其制备方法. 国家发明专利. 申请号:201710317353.8.
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16. 杨朕, 杨维本, 兰亚乾, 卓宁, 沈佳淳, 张讯通. 一种壳聚糖-金属有机框架复合小球及其制备方法和应用. 国家发明专利. 授权号: ZL201610080071.6.
17. 杨维本, 杨朕, 王旭增, 沈佳淳, 袁雨非. 一种多孔树脂-金属有机框架复合小球吸附剂及其制备方法和应用. 国家发明专利. 申请号:201611216276.4.
18. 杨朕, 任可馨, 杨维本, 沈佳淳, 张讯通. 一种温度敏感性壳聚糖絮凝剂及其制备方法和应用. 国家发明专利. 授权号: ZL 201610404239.4.

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20. 杨维本, 卓宁, 杨朕, 张子炜, 贾淑颖, 王芳. 一种动态可调温水质自动检测装置. 实用新型专利. 申请号:201520813670.5.

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