

### 科研项目:

1. 固态发酵系统中微生物扩张蛋白参与木质纤维素降解的基因行为及蛋白功能研究,国家自然科学基金青年基金, 2020/01-2022/12, 23 万元, 主持;
2. 浙江省自然科学基金青年基金, LQ19D030001, 丝状真菌中扩张蛋白与纤维素酶协同降解天然废弃木质的机制研究, 2019/01-2021/12, 10 万元, 主持;
3. 国家自然科学基金面上项目, 51878617, 垃圾填埋场抗生素和抗性基因的赋存特征及其去除优化机制研究, 2019/01-2022/12, 60 万元, 3/7;
4. 国家自然科学基金面上项目, 31470191, 双组份信号系统 BphS/BphT 对多溴联苯醚降解基因的转录调控机制研究, 2015/01-2018/12, 85 万元, 参加, 结题。

### 代表性论文:

1. **Qun Wang**, Lanhui Jiang, Chengran Fang\*, Liang Chen, Effects of di-*n*-butyl phthalate and di-2-ethylhexyl phthalate on pollutant removal and microbial community during wastewater treatment, *Ecotoxicology and Environmental Safety*, 2020, 198:110665.

2. **Qun Wang**, Xiaogang Wu, Lanhui Jiang, Chengran Fang\*, Hua Wang, Liang Chen, Effective degradation of Di-*n*-butyl phthalate by reusable, magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticle-immobilized *Pseudomonas* sp. W1 and its application in simulation, *Chemosphere*, 2020, 250:126339.

3. **Qun Wang**, Lanhui Jiang, Chengran Fang\*, Hongzhi Mao, Haifeng Zhuang, Transformation of phthalic acid diesters in an anaerobic/anoxic/oxic leachate treatment process, *Chinese Journal of Chemical Engineering*, 2020, 28: 249–253.

4. **Qun Wang**, Liang Chen, Chengran Fang\*, Hua Wang, Yun Shi, Yuhua Zhao\*, The overexpression of one single *cbh* gene making *Trichoderma asperellum* T-1 a better cellulase producer, *Annals of Microbiology*, 2019, 69: 673–683.

5. **Qun Wang**, Liang Chen, Daobing Yu, Hui Lin, Qi Shen, Yuhua Zhao\*, Excellent Waste Biomass-degrading Performance of *Trichoderma asperellum* T-1 during Submerged Fermentation, *Science of the Total Environment*, 2017, 609: 1329-1339.

6. **Qun Wang**, Liang Chen, Hui Lin, Daobing Yu, Qi Shen, Li wan, Yuhua Zhao\*, The binding, synergistic and structural characteristics of BsEXLX1 for loosening the main components of lignocellulose: lignin, xylan, and cellulose, *Enzyme and Microbial Technology*, 2016, 92:67-75.