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## 个人简介

理学博士、副教授、硕士生导师。现任华东理工大学生物工程系主任，九三学社上海市委教育专门委员会委员，上海市生物工程学会合成生物学专业委员会委员，上海市生物工程协会青年委员会委员，2015 年入选上海市浦江人才计划。主要从事生物催化方面的研究，作为负责人主持科技部重点研发计划项目子课题、国家自然科学基金、上海市自然科学基金、上海市浦江人才计划等项目；作为主要研究骨干参与国家自然科学基金重点项目。近年来在 PNAS, Lab Chip, J. Agric. Food Chem., Sensor Actuat B-Chem 等期刊上发表 SCI 论文 30 余篇，合著 1 本，申请中国发明专利 5 项，已授权专利 1 项。曾获华东理工大学青年五四奖章（个人奖，2019），上海市技术发明奖一等奖（2018，第 6 完成人）、上海市浦江人才（2015）、剑桥大学 Melville 奖学金（2011）、清华之友－东港奖学金一等奖（2006）等荣誉。

## 研究方向

本课题组发展基于液滴微流控和全细胞生物传感器的高通量定向进化和菌种筛选技术，采用生物信息学、合成生物学、蛋白质定向进化、计算化学等工具，精准发现和改造结构新颖、功能独特的酶催化剂，构建全新的绿色催化反应，实现手性分子的高效、高立体选择性合成和重大环境污染物的生物降解，拓展生物催化在资源环境、生物医药、食品安全领域的工程应用。主要研究方向：

1. 绿色合成化学：手性羟基酸、内酯、中链二元酸的生物合成。
2. 环境生物技术：有机磷农药、阻燃剂、塑化剂、微塑料的生物降解。
3. 超分子生物催化：纳米病毒样颗粒蛋白笼多酶自组装体系构建应用。

## 研究成果及主要发表文章

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