

生物化工

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其他专业：应用化学 ★精细化工

个人简介

现职：

大连理工大学教授、长江学者特聘教授、精细化工国家重点实验室主任、国务院学科评议组成员、国家杰出青年基金获得者

简历：

1962年生。1978年就读于大连理工大学精细化工专业，1982年获学士学位，随后在武汉染料厂工作，1983年8月起为大连理工大学精细化工专业研究生，1986年获硕士学位，1989年获博士学位，1990~1992年为南开大学有机化学博士后。1992年回大连理工大学化工学院工作，先后在瑞典斯德哥尔摩大学和美国西北大学做访问学者。1995年辽宁省先进青年科技工作者，2000年“大连市十大科技青年”，2000年被评为教育部“跨世纪优秀人才”，2001年国务院特殊津贴获得者，2007年国家杰出青年基金获得者，教育部长江学者特聘教授。2008年辽宁省首届攀登学者。2010年辽宁省领军人才。

社会兼职

精细化工国家重点实验室主任、国务院学科评议组成员、辽宁省精细化工工程技术中心主任、中国染料标准化技术委员会副主任、教育部科学技术委员会化学化工学部委员、中国化工学会精细化工委员会委员、美国染料与纺织化学协会会员、大连市石化行业协会专家委员会副主任。

研究领域（研究课题）

1. 功能性染料、颜料及其工业应用：

染料分子结构与功能的调控；数码喷墨用染料与颜料；染料超分子体系的光诱导分子内电子转移、电荷转移、质子转移。

2. 生物分子荧光探针：

荧光染料及其在生物芯片、荧光PCR、DNA检测、蛋白质分析、荧光免疫分析、DNA测序、细胞内小分子（离子）检测中的应用。

3. 精细化工清洁制备技术

硕博研究方向

1. 应用化学、精细化工专业（硕士生、博士生）：

- ①功能染料及其超分子光化学
- ②生物分子荧光探针

2. 生物化工、分析化学专业（博士生）：

生物分子荧光探针：细胞内小分子荧光探针、DNA及RNA选择性荧光探针

出版著作和论文

161. Xiaojun Peng*, Tong Wu, Jiangli Fan, Si Zhang, Jingyun Wang, Fengling Song and Shiguo Sun. Discovery of an Effective Minor Groove Binder as Red Fluorescent Marker for Live-Cell DNA Imaging and Quantification. *Angew. Chem. Int. Ed.*, 2011, in press
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工作成果（奖励、专利等）

（第一获奖人）

大幅面数码喷墨染料及其应用，国家技术发明二等奖（2006年）

计算机彩色喷绘墨水的研制，辽宁省科技进步一等奖（2004年）

大幅面数码喷墨染料及其应用，中国石油和化学工业技术发明一等奖（2005年）