

基本信息

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简介

崔旭，工学博士/高级工程师/副研究员/硕士生导师。现任中国科学院深圳先进技术研究院医药所人体组织与器官退行性研究中心微环境调控组织再生及其产业化课题组 PI。主要从事于生物活性玻璃及其相关生物医用材料的研究与开发。研究方向涉及药物缓释载体，三维骨修复支架，可注射骨水泥以及微纳生物玻璃纤维敷料等多种生物医用材料。在材料与生物交叉学科（医用生物无机材料及可植入器械领域）内拥有多年研究开发经历，这些研究也被应用于创伤修复，骨科假体植入，可控药物缓释系统等领域中。负责并参与了 6 种骨和创伤医疗三类医疗器械、3 种二类 and 一类器械等的产业研发，目前 1 种三类器械已经开展了临床试验，1 种二类器械完成了临床资料评价。主持并参与了科技部重点研发计划、国家自然科学基金委项目、中国科学院前沿和先导项目、广东省自然科学基金项目和深圳市科创委技术攻关、技术开发和基础研究布局项目等多个省部级和地方项目 15 项。在国际知名生物材料相关期刊发表篇论文 20 篇。申请国家发明专利 15 项，其中已获得授权专利 6 项。在国际和国内学术会议报告 10 余次。同时担任“Journal of Tissue Engineering and Regenerative Medicine”等知名杂志的审稿人，也是“骨水泥与可注射材料专业委员会”委员。

社会任职

骨水泥与可注射材料专业委员会委员

学科类别

生物医学工程；生物材料

研究方向

骨组织工程；骨免疫学；生物活性玻璃；创伤敷料；海洋生物材料

承担科研项目情况

国家自然科学基金；国家科技部重点研发计划；广东省自然科学基金；深圳市科创委相关项目。

主要代表论著

1. Wenlong Liu, Xiuli Dan, William W. Lu, Xiaoli Zhao, Changshun Ruan, Ting Wang, **Xu Cui**, Xinyun Zhai, Yufei Ma, Deping Wang, Wenhai Huang, and Haobo Pan*. Spatial Distribution of Biomaterial Microenvironment pH and Its Modulatory Effect on Osteoclasts at the Early Stage of Bone Defect Regeneration. *ACS Applied Materials & Interfaces*, 2019, DOI: 10.1021/acsami.8b20580.
2. Tiancheng Lv, Wei Liang, Li Li, **Xu Cui**, Xiaomou Wei, Haobo Pan, Bing Li*. Novel calcitonin gene - related peptide/chitosan - strontium - calcium phosphate cement: Enhanced proliferation of human umbilical vein endothelial cells in vitro. *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 2018, DOI: 10.1002/jbm.b.34091.
3. **Xu Cui**, Chengcheng Huang, Meng Zhang, Changshun Ruan*, Songlin Peng, Li Li, Wenlong Liu, Ting Wang, Bing Li, Wenhai Huang, Mohamed N. Rahaman, William W Lu, Haobo Pan*. Enhanced osteointegration of poly(methylmethacrylate) bone cements by incorporating strontium-containing borate bioactive glass. *Journal of the Royal Society Interface*, 2017, 14(131): 20161057.
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 11. Hui Wang, Shichang Zhao, Wei Xiao, Xu Cui, Wenhai Huang, Mohamed N.

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