


基本信息

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简介

王怀雨博士：中国科学院深圳先进技术研究院研究员/博导，深圳市孔雀计划 B 类人才/广东省特支计划科技创新青年拔尖人才/中国科学院青年促进会会员，全国材料新技术发展研究会理事/中国颗粒协会青年委员会理事。2004 年本科毕业于北京大学，2009 年博士毕业于中国科学院理化技术研究所，2007-2009 年以及 2009-2013 年分别以研究助理和博士后身份在香港城市大学进行研究工作，主要研究方向为生物材料的表/界面功能构建。独立承担国家自然科学基金青年/面上项目、中科院 STS 区域重点项目、深港创新圈、深圳市基础研究布局等项目，累计承担科研经费逾千万元。共发表 SCI 论文 60 余篇，引用 3000 余次，一作/通讯作者论文 20 余篇，包括多篇 IF>10 的第一/通讯作者论文：Nat. Commun., Adv. Mater., Angew. Chem. Int. Ed., Adv. Sci., Biomaterials(6 篇), Small(2 篇)，并曾受邀为 Elsevier 杂志社出版的英文书籍《Characterization of Biomaterials》撰写其中章节。在知识产权方面，已有 6 项中国发明专利和 2 项美国发明专利获得授权。

社会任职

全国材料新技术发展研究会理事；中国颗粒学会青年理事会理事。

获奖及荣誉

2015 年入选深圳市海外高层次“孔雀计划”B 类人才；2015 年入选广东省科技创新青年拔尖人才；2017 年入选中国科学院青年创新促进会会员。

学科类别

生物医学工程；生物材料

研究方向

骨科植入材料；表/界面功能调控；组织修复与再生

承担科研项目情况

国家自然科学基金；中国科学院 STS 区域重点项目；深港创新圈项目；深圳市基础研究布局项目等。

主要代表论著

1. Nan Hu, Tao Hu, Ang Gao, Nong Gao, Marco J. Starink, Ying Chen, Wanting Sun, Qing Liao, *Liping Tong, *Xiaochang Xu, Paul K. Chu, ***Huaiyu Wang(Corresponding author)**. Homogeneous Anodic TiO₂ Nanotube Layers on Ti-6Al-4V Alloy with Improved Adhesion Strength and Corrosion Resistance. *Advanced Materials Interfaces*, 1801964, 2019.
2. #Zhibin Li, #Lie Wu, ***Huaiyu Wang(Corresponding author)**, Wenhua Zhou, Hanxia Liu, Haodong Cui, Penghui Li, *Paul K. Chu, *Xuefeng Yu. Synergistic Antibacterial Activity of Black Phosphorus Nanosheets Modified with Titanium Aminobenzenesulfanato Complexes. *ACS Applied Nano Materials*, 2, pp 1202-1209, 2019.
3. Liping Tong, Qing Liao, Yuetao Zhao, Hao Huang, Ang Gao, Wei Zhang, Xiaoyong Gao, Wei Wei, Min Guan, Paul K. Chu, ***Huaiyu Wang(Corresponding author)**. Near-Infrared Light Control of Bone Regeneration with Biodegradable Photothermal Osteoimplant. *Biomaterials*, 193, pp 1-11, 2019.
4. #Guomin Wang, #Hongqing Feng, Liangsheng Hu, Weihong Jin, Qi Hao, Ang Gao, Xiang Peng, Wan Li, Kwok-Yin Wong, ***Huaiyu Wang(Corresponding author)**, *Zhou Li, *Paul K. Chu. An Antibacterial Platform Based on Capacitive Carbon-Doped TiO₂ Nanotubes after Direct or Alternating Current Charging. *Nature Communications*, 9, 2055, 2018.
5. #Yuchang Weng, #Hanhua Liu, Shunping Ji, Qian Huang, Hao Wu, Zhibin Li, *Zhongzhen Wu, ***Huaiyu Wang(Corresponding author)**, Liping Tong, Ricky K.Y. Fu, *Paul K. Chu, Feng Pan. A Promising Orthopedic Implant Material with Enhanced Osteogenic and Antibacterial Activity: Al₂O₃-Coated Aluminum Alloy. *Applied Surface Science*, 457, pp 1025-1034, 2018.

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7. **Huaiyu Wang**, *Xuefeng Yu, Few-Layered Black Phosphorus: From Fabrication and Customization to Biomedical Applications. *Small*, 14, 1702830, 2018.
8. #Jundong Shao, #Hanhan Xie, ***Huaiyu Wang**(Corresponding author), Wenhua Zhou, Qian Luo, *Xuefeng Yu, *Paul K. Chu. 2D Material-Based Nanofibrous Membrane for Photothermal Cancer Therapy. *ACS Applied Materials & Interfaces*, 10, pp 1155-1163, 2018.
9. Ang Gao, Ruiqiang Hang, Wan Li, Wei Zhang, Penghui Li, Guomin Wang, Long Bai, Xuefeng Yu, ***Huaiyu Wang**(Corresponding author), *Liping Tong, *Paul K. Chu. Linker-free Covalent Immobilization of Heparin, SDF-1 α , and CD47 on PTFE Surface for Antithrombogenicity, Endothelialization and Anti-Inflammation. *Biomaterials*, 140, pp 201-211, 2017.
10. Zhibin Li, Jundong Shao, Qian Luo, *Xuefeng Yu, Hanhan Xie, Haidi Fu, Siying Tang, ***Huaiyu Wang**(Corresponding author), Guangli Han, *Paul K. Chu. Cell-Borne 2D Nanomaterials for Efficient Cancer Targeting and Photothermal Therapy. *Biomaterials*, 133, pp 37-48, 2017.
11. Zhengbo Sun, Yuetao Zhao, Zhibin Li, Haodong Cui, Yayan Zhou, Weihao Li, Wei Tao, *Han Zhang, ***Huaiyu Wang**(Corresponding author), Paul K. Chu, *Xuefeng Yu. TiL₄-Coordinated Black Phosphorus Quantum Dots as an Efficient Contrast Agent for *In Vivo* Photoacoustic Imaging of Cancer. *Small*, 13, 1602896, 2017.
12. Yuetao Zhao, ***Huaiyu Wang**(Corresponding author), Hao Huang, Quanlan Xiao, Yanhua Xu, Zhinan Guo, Hanhan Xie, Jundong Shao, Zhengbo Sun, Weijia Han, *Xuefeng Yu, Penghui Li, *Paul K. Chu. Surface Coordination of Black Phosphorus for Robust Air and Water Stability. *Angewandte Chemie International Edition*, 55, pp 5003-5007, 2016.
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15. #Liping Tong, #Wenhua Zhou, Yuetao Zhao, Xuefeng Yu, ***Huaiyu Wang**(Corresponding author), *Paul K. Chu. Enhanced Cytocompatibility and Reduced Genotoxicity of Polydimethylsiloxane Modified by Plasma Immersion Ion Implantation. *Colloids and Surfaces B: Biointerfaces*, 148, pp 139-146, 2016.

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