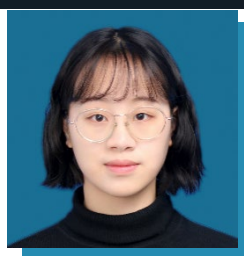

# 郑漫辉

2023 届 应届生 女 中共党员

## 导师：王学川教授


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## 教育背景

2018.09-2023.06 陕西科技大学（硕博连读） 轻工技术与工程（胶原基生物医用材料方向） 工学

2014.09-2018.06 嘉兴学院（本科） 轻化工程 工学

## 导师信息

**王学川，二级教授**，博士生导师，陕西科技大学副校长，研究方向包括**生物质资源化利用**和**柔性医用电子材料的开发应用**。任国务院学位委员会轻工技术与工程学科评议组成员兼秘书长，教育部高等学校轻工类专业教学指导委员会副主任委员。荣获“全国模范教师”，享受国务院特殊津贴，2007 年入选“新世纪百千万人才”国家级人选；获得“陕西省特支计划教学名师”、“陕西省突出贡献专家”、“陕西省优秀教师”等荣誉和称号。

## 研究方向

**多功能胶原基生物医用电子材料的构建及应用研究**

## 短期访学

2019 年 11 月-2020 年 2 月 黄嘉良教授 **香港浸会大学** 中国香港

## 学术论文

[1] **Manhui Zheng**, Xuechuan Wang, Yining Chen, Ouyang Yue, Zhongxue Bai, Boqiang Cui, Huie Jiang and Xinhua Liu. A Review of Recent Progress on Collagen-Based Biomaterials[J]. Advanced Healthcare Materials, 2022, 2202042. (**IF=11.092, Q1, Top**)

[2] **Manhui Zheng**, Xuechuan Wang, Ouyang Yue, Zhongxue Bai, Boqiang Cui and Xinhua Liu. Electrochemical biomaterials for self-powered implantable "tissue batteries": A tutorial review[J]. Nano Research, 2022. (**IF=10.269, Q1, Top**)

[3] **Manhui Zheng**, Xuechuan Wang, Ouyang Yue, Mengdi Hou, Huijie Zhang, Sebastian Beyer, Anna Maria Blocki, Qin Wang, Guidong Gong, Xinhua Liu and Junling Guo. Skin-inspired gelatin-based flexible bio-electronic hydrogel for wound healing promotion and motion sensing[J]. Biomaterials, 2021, 276. (**IF=15.304, Q1, Top**)

[4] Xinhua Liu, **Manhui Zheng**, Xuechuan Wang, Xiaomin Luo, Mengdi Hou and Ouyang Yue. Biofabrication and Characterization of Collagens with Different Hierarchical Architectures[J]. Acs Biomaterials Science & Engineering, 2020, 6(1): 739-748. (**IF=5.395, Q2**)

[5] Youyou Wang*, **Manhui Zheng***, Xinhua Liu, Ouyang Yue, Xuechuan Wang and Huie Jiang. Advanced collagen nanofibers-based functional bio-composites for high-value utilization of leather: A review[J]. Journal of Science-Advanced Materials and Devices, 2021, 6(2): 153-166. (**IF=7.382, Q2, co-first author**)

[6] Huie Jiang*, **Manhui Zheng***, Xinhua Liu, Sixiao Zhang, Xuechuan Wang, Yining Chen, Mengdi Hou and Jingbo Zhu. Feasibility Study of Tissue Transglutaminase for Self-Catalytic Cross-Linking of Self-Assembled Collagen Fibril Hydrogel and Its Promising Application in Wound Healing Promotion[J]. Acs Omega, 2019, 4(7): 12606-12615. (**IF=4.132, Q3, co-first author**)

[7] Zhongxue Bai, Xuechuan Wang, **Manhui Zheng**, Ouyang Yue, Mengchen Huang, Xiaoliang Zou, Boqiang Cui, Long Xie, Shuyin Dong, Jiaojiao Shang, Guidong Gong, Anna M. Blocki, Junling Guo and Xinhua Liu. Mechanically Robust and Transparent Organohydrogel-Based E-Skin Nanoengineered from Natural Skin[J]. Advanced Functional Materials, 2023. (**IF=19.924, Q1, Top**)

[8] Ouyang Yue, Xuechuan Wang, Mengdi Hou, **Manhui Zheng**, Dongyu Hao, Zhongxue Bai, Xiaoliang Zou, Boqiang Cui, Chunlin Liu and Xinhua Liu. Smart nanoengineered electronic-scaffolds based on triboelectric nanogenerators as tissue batteries for integrated cartilage therapy[J]. Nano Energy, 2023, 107. (**IF=19.924, Q1, Top**)

[9] Zhongxue Bai, Xuechuan Wang, Mengchen Huang, **Manhui Zheng**, Ouyang Yue, Dongyu Hao, Yu Wang, Xiaoliang Zou, Boqiang Cui, Long Xie, Siyu Zha, Haiyan Ju and Xinhua Liu. Versatile nano-micro collagen fiber-based wearable electronics for health monitoring and thermal management[J]. Journal of Materials Chemistry A, 2023, 11(2): 726-741. (**IF=14.511, Q2, Top**)

[10] Xuechuan Wang, Zhongxue Bai, **Manhui Zheng**, Ouyang Yue, Mengdi Hou, Boqiang Cui, Rongrong Su, Chao Wei and Xinhua Liu. Engineered gelatin-based conductive hydrogels for flexible wearable electronic devices: Fundamentals and recent advances[J]. Journal of Science-Advanced Materials and Devices, 2022, 7(3). (**IF=7.382, Q2**)

[11] Lijuan Chen, Huie Jiang, **Manhui Zheng**, Zhijian Li, Nihao Li, Suqiu Zhao and Xinhua Liu. Fly-antennae-inspired biomass-based fluorescent platform for NH3 quantitative detection and visual real-time monitoring of seafood spoilage[J]. Journal of Hazardous Materials, 2022, 434. (**IF=14.224, Q1, Top**)

[12] Mengdi Hou, Xuechuan Wang, Ouyang Yue, **Manhui Zheng**, Huijie Zhang and Xinhua Liu. Development of a multifunctional injectable temperature-sensitive gelatin-based adhesive double-network hydrogel[J]. Biomaterials Advances, 2022, 134.

[13] Ouyang Yue, Xuechuan Wang, Mengdi Hou, **Manhui Zheng**, Zhongxue Bai, Boqiang Cui, Siyu Cha and Xinhua Liu. Skin-inspired wearable self-powered electronic skin with tunable sensitivity for real-time monitoring of sleep quality[J]. Nano Energy, 2022, 91. (**IF=19.924, Q1, Top**)

[14] Ouyang Yue, Xuechuan Wang, Xinhua Liu, Mengdi Hou, **Manhui Zheng**, Youyou Wang and Boqiang Cui. Spider-Web and Ant-Tentacle Doubly Bio-Inspired Multifunctional Self-Powered Electronic Skin with Hierarchical Nanostructure[J]. Advanced Science, 2021, 8(15). (**IF=17.521, Q1, Top**)

[15] Xuechuan Wang, Mengdi Hou, Xinhua Liu, Ouyang Yue and **Manhui Zheng**. Feasibility Study of Gelatin Preparation from the Bioinspired Collagen Aggregates by a "Two-step" Facile Degradation Method[J]. Acs Applied Bio Materials, 2021, 4(3): 2363-2372.

[16] Xinhua Liu, Mengdi Hou, Xiaomin Luo, **Manhui Zheng**, Xuechuan Wang, Huijie Zhang and Junling Guo. Thermoresponsive Hemostatic Hydrogel with a Biomimetic Nanostructure Constructed from Aggregated Collagen Nanofibers[J]. Biomacromolecules, 2021, 22(2): 319-329. (**IF=6.978, Q2**)

[17] Xinhua Liu, Ouyang Yue, Xuechuan Wang, Mengdi Hou, **Manhui Zheng** and Huie Jiang. Preparation and application of a novel biomass-based amphoteric retanning agent with the function of reducing free formaldehyde in leather[J]. Journal of Cleaner Production, 2020, 265. (**IF=19.924, Q1, Top**)

[18] Xuechuan Wang, Ouyang Yue, Xinhua Liu, Mengdi Hou and **Manhui Zheng**. A novel bio-inspired multi-functional collagen aggregate based flexible sensor with multi-layer and internal 3D network structure[J]. Chemical Engineering Journal, 2020, 392. (**IF=11.072, Q1, Top**)

[19] Chi Zheng, Xinhua Liu, Xiaomin Luo, **Manhui Zheng**, Xuechuan Wang, Weihua Dan and Huie Jiang. Development of a novel bio-inspired "cotton-like" collagen aggregate/chitin based biomaterial with a biomimetic 3D microstructure for efficient hemostasis and tissue repair[J]. Journal of Materials Chemistry B, 2019, 7(46): 7338-7350. (**IF=7.571, Q2, Top**)

## 中国发明专利

[1] 王学川, **郑漫辉**, 刘新华, 等. 脱细胞猪真皮基质温敏性抗菌导电支架的制备方法及应用: 中国, ZL 202111351899.8 [P]. 2021-11-16.（授权）

[2] 王学川, **郑漫辉**, 刘新华, 等. 一种基于压电纳米发电机的心脏再生补片材料的制备方法: 中国, CN 202211119531.3 [P] 2022-11-24.

[3] 王学川, **郑漫辉**, 刘新华, 等. 一种具有自修复功能的仿生电子皮肤医用支架材料及其制备方法: 中国, CN 202010716078.9 [P]. 2020-07-23.

## 授权美国发明专利

[1] Wang X, **Zheng M**, Liu X, et al. Conductive biomimetic skin scaffold material with self-repairing function and a method of preparing the same: US, 20220023507 B2 [P]. 2022-11-29.

## 主要参与会议

[1] 2021 柔性光电材料与智能传感发展大会

[2] 2020 第二届木质素和胶原基材料青年国际会议

[3] 2019 国际生物基材料技术与应用论坛

[4] 2019 第三届先进凝胶材料与软物质国际学术讨论会

[5] 2019 XXXV International Union of Leather Technologists and Chemists Societies (Poster)

## 主要荣誉

[1] “建行杯”第六届中国国际“互联网+”大学生创新创业大赛 省级金奖 2020.10

[2] “建行杯”第六届中国国际“互联网+”大学生创新创业大赛 省级银奖 2020.10

[3] “建行杯”第七届中国国际“互联网+”大学生创新创业大赛 省级银奖 2021.09

[4] 研究生国家奖学金 国家级 2021.11

## 个人技能

[1] 办公软件: 可熟练运用 Office、Endnote、Adobe Premiere 等科研软件

[2] 科研绘图: 可熟练运用 3ds Max、C4D、Photoshop、Origin、Chemdraw 等科研软件

[3] 英语水平: 通过 CET 6，具备良好的英语读写能力