## **Resume of Pengpeng DENG**

#### **Basic Information**



School: School of Life and Health Sciences

Gender: Male
Date of Birth: 199303
Title: Lecturer

Education: Ph.D of Polymer Chemistry and

**Physics** 

Tutor: Master degree

Interest of Emulsions, Biomass gel materials;

research: Food packaging materials

### **Academic Background**

From September 2012 to July 2016, Hubei University of Arts and Science, Bachelor's degree in Chemistry

From September 2016 to July 2018, Wuhan University, Master's degree of Chemical Engineering

From September 2018 to July 2021, Wuhan University, Ph.D of Polymer Chemistry and Physics

### **Enrollment Information**

1. Enrollment Discipline: Food Science and Engineering, Chemistry

2. Research direction: Structure and Function of Food Soft Matter

3. Enrollment Year: 2024-2025

## **Representative Projects**

- 1. Scientific Research Project of the Education Department of Hubei Province" Mechanism of water distribution and network strength on mechanical properties of non-fermented dough during freezing storage", Hubei Province, Project leader.
- 2. Collaborative Grant-in-Aid of HBUT National "111" Center for cellular Regulation and Molecular Pharmaceutics" Double crosslinked chitosan hydrogel for wound hemostasis", Hubei Province, Project leader.

# **Representative Articles**

- 1. Pengpeng Deng, Yunxin Zhang, Qianxi Deng, Yufei Sun, Yuewen Li, Zihao Wang, Fatang Jiang, Multifunctional sodium alginate-based self-healing edible cross-linked coating for banana preservation, Food Hydrocolloids, 2024, 151, 109753.
- 2. Pengpeng Deng, Yushuang Zhang, Zhenyuan Niu, Yuewen Li, Zihao Wang, Fatang Jiang, Multifunctional konjac glucomannan/xanthan gum self-healing coating for

- bananas preservation, International Journal of Biological Macromolecules, 2024, 270, 132287.
- 3. Pengpeng Deng, Zihao Wang, Jinjing Bu, Yuqi Fan, Ying Kuang, Fatang Jiang, Konjac glucomannan-based nanocomposite spray coating with antimicrobial, gas barrier, UV blocking, and antioxidation for bananas preservation, International Journal of Biological Macromolecules, 2024, 265, 130895.
- 4. Pengpeng Deng, Xinping Liu, Yan Li, Yue-Fei Zhang, Kao Wu, Fatang Jiang, Konjac glucomannan-based aerogels with excellent thermal stability and flame retardancy for thermal insulation application, International Journal of Biological Macromolecules, 2024, 254, 127814.
- 5. Pengpeng Deng, Feixiang Chen, Haodong Zhang, Yun Chen, Jinping Zhou, Multifunctional double-layer composite hydrogel conduit based on chitosan for peripheral nerve repairing, Advanced Healthcare Materials, 2022, 2200115.
- 6. Pengpeng Deng, XiaoLiang, Feixiang Chen, Yun Chen, Jinping Zhou, Novel multifunctional dual-dynamic-bonds crosslinked hydrogels for multi-strategy therapy of MRSA-infected wounds, Applied Materials Today, 2022, 26, 101362.
- 7. Pengpeng Deng, Feixiang Chen, Haodong Zhang, Yun Chen, Jinping Zhou, Conductive, Self-healing, Adhesive and Antibacterial Hydrogel Based on Lignin/Cellulose for Rapid MRSA Infected Wound Repairing. *ACS Applied Materials & Interfaces*, 2021, 13, 44, 52333-52345.
- 8. Pengpeng Deng, Lichao Yao, Juanjuan Chen, Zhigang Tang, Jinping Zhou, Chitosan-based hydrogels with injectable, self-healing and antibacterial properties for wound healing. *Carbohydrate Polymers*, 2021, 276, 118718.
- 9. Pengpeng Deng, Wenyi Jin, Zilin Liu, Mingyong Gao, Jinping Zhou, Novel multifunctional adenine-modified chitosan dressings for promoting wound healing. *Carbohydrate Polymers*, 2021, 260, 117767.
- 10. Pengpeng Deng, Juanjuan Chen, LichaoYao, Pingan Zhang, Jinping Zhou, Thymine-modified chitosan with broad-spectrum antimicrobial activities for wound healing, *Carbohydrate Polymers*. 2021, 257, 117630.
- 11. Pengpeng Deng, Jing Sun, Juanjuan Chen, Xueqing Zou, Liqiong Liao. Fast responsive photo-switchable dual-color fluorescent cyclodextrin nanogels for cancer cell imaging. *Carbohydrate Polymers*, 2019, 210, 379-388.