# Resume of Bengao ZHU

## **Basic Information**



School : Gender: Date of Birth: Title: Education: Tutor: E-mail: Interest of research:

School of Life and Health Sciences male 920317 Lecturer Ph.D of Chemical biology Master degree 1581576402@qq.com Hard tissue repair, cancer theranostics

## Academic Background

From September 2011 to June 2015, Qingdao University of Scinece and Technology, Bachelor's degree in Polymer science and Engineering;

From September 2016 to June 2019, Sichuan University, Master's degree of Materials Engineering;

From September 2019 to September 2023, Huazhong University of Scinece and Technology, Ph.D of Chemical biology.

#### **Enrollment Information**

- 1. Enrollment Discipline: Master of Pharmacy
- 2. Research direction: Hard tissue repair, cancer theranostics
- 3. Enrollment Year: 2024-2025

## **Representative Projects**

1. The University Doctoral Program, "Construction of functional LDH nanomedicines and its antitumor effects", 2024-6 to , Hubei, Project leader.

2.National Natural Science Foundation of China (NSFC), General Program, "Construction of supramolecular polymer nanomedicine based on multiple hydrogen bonding its anti-tumor effects", 2022-01 to 2025-12, China, Participation.

3.NSFC, General Program, "A new type of mechanical-conductive tidal line and selective barrier interface of calcified cartilage study on osteochondral repair materials", 2020-01 to 2023-12, China, Participation.

4.NSFC, Youth Science Fund Program, "Construction of peptide-PAMAM-galardin system molecular mechanism of bionic remineralization induced by type I collagen", 2019-01 to 2021-12, China, Participation.

#### **Representative Articles**

1.One-step phosphorylated poly(amide-amine) dendrimer loaded with apigenin for simultaneous remineralization and antibacterial of dentine. Colloids and Surfaces B:

Biointerfaces, 2018, 172, 760-768.

2.Promotion of the osteogenic activity of an antibacterial polyaniline coating by electrical stimulation. Biomaterials Science, 2019, 7, 4730-4737.

3.MnO<sub>2</sub> coated nanotheranostic LDH for synergistic cascade chemo/chemodynamic cancer therapy under the guidance of MRI-targeted diagnosis. Biomaterials Science, 2022, 10, 1317-1325.

4.Starvation-assisted and photothermal-thriving combined chemo/chemodynamic cancer therapy with PT/MR bimodal imaging. Biomaterials Science, 2023, 11(6), 2129-2138

5.Monolayer LDH nanosheets with ultrahigh ICG loading for phototherapy and Ca<sup>2+</sup>-induced mitochondrial membrane potential damage to co-enhance cancer immunotherapy. ACS Applied Materials & Interfaces, 2023, 15(7), 9135-9149