

# Resume of Xuan ZHANG

## **Basic Information**



School :	School of Life Sciences and Health
Gender:	Female
Date of Birth:	198705
Title:	Associate Professor
Education:	Ph.D of Food Science
Tutor:	Master Degree
Interest of research:	Food Colloid and Interface, Nutrient Delivery, Novel Functional Materials for Food

## **Academic Background**

From September 2005 to July 2009, Beijing University of chemical technology, Bachelor's degree in Applied Chemistry;

From September 2009 to July 2012, Beijing University of chemical technology, Master's degree of Chemistry;

From September 2017 to July 2021, Huazhong Agricultural University, Ph.D of Food Science.

## **Oversea visiting**

2023/11-2024/11, Visiting scholar, The University of Reading, UK;

## **Enrollment Information**

1. Enrollment Discipline: Master of Food Science, Master of Biomedicine
2. Research direction: Food Colloid and Interface, Nutrient Delivery, Novel Functional Materials for Food
3. Enrollment Year: 2023-2024

## **Representative Projects**

1. Mechanism of stabilization of aerated emulsions stabilized with gliadin colloid particles through one step shearing induced by electrostatic repulsion (Sponsored by National Natural Science Foundation of China);
2. Constructure of high internal phase Pickering emulsions stabilized with gliadin/CMC particles for food 3D-print (Sponsored by the Collaborative Grant-in-Aid HBUT National "111"Center for Cellular Regulation and Molecular Pharmaceutics);
3. Construction of highly processable high interior phase Pickering Emulsion by Wheat alcohol soluble protein /CMC composite colloidal particles (Sponsored by Hubei University of Technology).

## **Representative Articles**

1. Zhang, X., Chen, Y., Li, R., Shi, Y., Zhao, Y., Li, B., Chen, Y., Zhu, X., (2024).

Fabrication of pea protein isolate-stabilized oil-in-water emulsions with high freeze-thaw stability: effect of high intensity ultrasonic on emulsions and interfacial protein structure, *Food Hydrocolloids*, 110484. (IF=11.0)

2. Zhang, D., Yang, Y., Li, R., Rong, X., Zhang, W., Zhang, M., Li, B., & **Zhang, X\***. (2024). Effects of co-assembly of gliadin and carboxymethyl cellulose on the high internal phase Pickering emulsions: Rheology properties, 3D printing performance and oil-soluble nutrient delivery. *Food Hydrocolloids*, 155. (IF=11.0)
3. **Zhang, X.**, Zhang, D., Rong, X., Yang, Y., Liang, H., Li, J., & Li, B. (2024). Combining in-situ observation and interfacial rheology as a tool to investigate the possible mechanism for improved emulsifying performance of gliadin-based colloid particles. *LWT*, 199. (IF=6.0)
4. **Zhang, X.**, Rong, X., Zhang, D., Yang, Y., Li, B. (2023). Fabrication of natural W1/O/W2 double emulsions stabilized with gliadin colloid particles and soybean lecithin, *Food Hydrocolloids*, 2023, 144(108978) (IF=11.0)
5. **Zhang, X.**, Liang, H., Li, J., & Li, B. (2022). Fabrication of processable and edible high internal phase Pickering emulsions stabilized with gliadin/sodium carboxymethyl cellulose colloid particles. *Food Hydrocolloids*, 128. (IF=11.0)
6. **Zhang, X.**, Zhang, Z., Liang, H., Li, J., Wen, L., Geng, F., & Li, B. (2021). Influence of solvent polarity of ethanol/water binary solvent on the structural, emulsifying, interfacial rheology properties of gliadin nanoparticles. *Journal of Molecular Liquids*, 344. (IF=6.0)
7. **Zhang, X.**, Liang, H., Li, J., Wei, X., & Li, B. (2020). Improving the emulsifying property of gliadin nanoparticles as stabilizer of Pickering emulsions: Modification with sodium carboxymethyl cellulose. *Food Hydrocolloids*, 107. (IF=11.0)