

Resume of Zhiming Gao

Basic Information



School :	School of Life and Health Sciences
Gender:	Male
Date of Birth:	198109
Title:	Professor
Education:	Ph.D of Food Science
Tutor:	Doctor degree, Master degree
Interest of research:	The nano & micro structure of foods Food emulsions, Food hydrogels

Academic Background

From September 2000 to July 2004, Northwest University of Agricultural & Forest, Bachelor's degree of food science;

From September 2004 to July 2007, Northwest University of Agricultural & Forest, Master's degree of food science;

From September 2010 to July 2014, South China University of Technology, Ph. D of Food science.

Oversea visiting

Enrollment Information

1. Enrollment Discipline: Undergraduate or master's students majoring in food, medicine, and health-related fields
2. Research direction: Food emulsion, Food hydrogel
3. Enrollment Year: 2024-2025

Representative Projects

1. Natural Science Foundation of China "Formation of the protein micro-aggregates during food thermal processing and its influencing mechanism on the protein digestion", China, Project leader.
2. Natural Science Foundation of China " Interfacial adsorption and food emulsion stabilization mechanisms of natural polysacharrides-based microgels", China, Project leader.
3. Natural Science Foundation of Hubei Province " Inhibition mechanism of oil oxidation behavior by gelating the oil. ", China, Project leader.

Representative Articles

1. Wenxin Jiang, Xinwei Xiong, Fengting Li, Wei Lu, Bing Hu, **Zhiming Gao***, Yuehan Wu, Dan

- Yuan, Yanlei Li. Complexation of Locust bean gum and κ -carrageenan Microgels, along its contribution to emulsion stability [J]. *Food Hydrocolloids*, 2024
2. Yuehan Wu, Shanshan Zhang, Ziyou Yan, Shiyang Li, Qianwen Wang, **Zhiming Gao***. Improvement of Stress Resistance of Microencapsulated *Lactobacillus plantarum* by Emulsion Electrospinning [J]. *Foods*, 2024, 13: 1897.
 3. Dan Yuan, Wenqian Xiao, Ao Gao, Wei Lu, **Zhiming Gao***, Yuehan Wu, Wenxin Jiang, Yanlei Li. In vitro Colon Fermentation Behaviors of Ca^{2+} Cross-Linked Guluronic Acid Block from Sodium Alginate [J]. *Food & Function*, 2024
 4. Wenxin Jiang, Hefan Zhang, Xinwei Xiong, Fengting Li, Wei Lu, Bing Hu, **Zhiming Gao***, Yuehan Wu, Dan Yuan, Yanlei Li. Enhancing the Mickering Emulsifying Capacity of Agarose Microgels by Complexation with Microamounts of Sorbitan Monolaurate (Tween-20) [J]. *International journal of food engineering*, 2024
 5. Yanlei Li, Yiying Sun, Lin Lu, **Zhiming Gao***, Yuehan Wu, Wenxin Jiang, Dan Yuan. Removal of phytic acid in rapeseed protein based on the pretreatment of rapeseed meal [J]. *International Journal of food engineering*, 2024
 6. Yanlei Li, Ruiting Chang, Duanyang Zhu, Lin Lu, **Zhiming Gao***, Yuehan Wu, Wenxin Jiang, Dan Yuan. Strengthening the Diffusion Behaviors of Sodium Ions by Interactions between Gum Arabic and Oral Mucin [J]. *Food hydrocolloids*, 2023
 7. Wenxin Jiang, Wei Xiang, Wei Lu, Dan Yuan, **Zhiming Gao***, Bing Hu, Yanlei Li, Yuehan Wu, Zhengpeng Fen. Emulsifying performance of the hexadecyltrimethylammonium bromide (CTAB) complexed alginate microgels: effects from their deformability on oil-water interface [J]. *International Journal of Biological Macromolecules*, 253 (2023): 127509.
 8. Dan Yuan, Wenqian Xiao, **Zhiming Gao***, Bing Hu, Wenxin, Jiang, Yanlei Li, Yuehan Wu, Xuewen Ni. Modulating in vitro Fecal Fermentation Behavior of Sodium Alginate by Ca^{2+} Crosslinking [J]. *Food Research International*, 174 (2023): 113552.
 9. Yanlei Li, Fangfang Chen, **Zhiming Gao***, Wei Xiang, Yuehan Wu, Bing Hu, Xuewen Ni, Katsuyoshi Nishinari, Yapeng Fang. Influence of interfacial properties/structure on oxygen diffusion in oil-in-water emulsions[J]. *Food research international*, 2023, 170: 112973.
 10. Wenxin Jiang, Jing Wang, Dan Yuan, **Zhiming Gao***, Bing Hu, Yanlei Li, Yuehan Wu. Fabrication, Characterization and Emulsifying Properties of Agarose Microgel [J]. *International Journal of Biological Macromolecules*, 2023, 241: 124565.
 11. Yuehan Wu, Jinhui Du, Jiahao Zhang, Yanlei Li, **Zhiming Gao***, pH Effect on the Structure, Rheology, and Electrospinning of Zein [J]. *Foods*, 2023, 12: 1395.
 12. Wenxin Jiang, Wei Xiang, Longquan Xu, Dan Yua, **Zhiming Gao***, Bing Hu, Yanlei Li, Yuehan Wu. Fabrication, characterization, and emulsifying properties of CTAB complexed alginate microgel [J]. *Food hydrocolloids*, 2023, 140: 108607.
 13. Yanlei Li, Chao Zhang, Bing Hu, **Zhiming Gao***, Yuehan Wu, Qianchun Deng, Katsuyoshi Nishinari, Yapeng Fang. Formation and Application of Edible Oleogels Prepared by Dispersing Soy Fiber Particles in Oil Phase [J]. *Food research international*, 2023, 164: 112369.
 14. **Zhiming Gao***, Chen Gao, Wenxin Jiang, Longquan Xu, Bing Hu, Xiaolin Yao, Yanlei Li, Yuehan Wu. In situ crosslinking sodium alginate on oil-water interface to stabilize the O/W emulsions [J]. *Food hydrocolloids*, 2023, 135: 108233.
 15. **Zhiming Gao***, Chao Zhang, Yanlei Li, Yuehan Wu, Qianchun Deng, Xuewen Ni. Edible Oleogels Fabricated by Dispersing Cellulose Particles in Oil Phase: Effects from the Water Addition[J]. *Food hydrocolloids*, 2023, 134: 108040.