Resume of Fusheng SUN

Basic Information

School :	College of Life Science and Health Engineering
Gender：	Male
Date of Birth：	198705
Title：	Lecturer
Education：	Ph.D of Science
Tutor：	Doctor degree
Interest of research:	Composite interface characteristics of food macromolecules and delivery of functional substances

Academic Background

From September 2007 to July 2011, Dezhou University, Bachelor's degree in Biotechnology;
From September 2011 to July 2013, Huazhong University of Science and Technology, Master's degree of Science;
From September 2013 to September 2017, Huazhong University of Science and Technology, Ph.D of Science;
From September 2017 to December 2019, Huazhong University of Science and Technology, Post-doctor.

Representative Projects

1.The National Natural Science Foundation of China (32202049) " Study on the relationship between linear and nonlinear interfacial rheology and microgel emulsion stability", China, Project leader.
2. The National Natural Science Foundation of China (31771418) " Study on regulation mechanism of carotenoid metabolism in wheat and creation of high content new germplasm ", China, Participate in.
3. The HBUT National "111" Center for Cellular Regulation and Molecular Pharmaceutics (XBTK-2022016), China, Project leader.
4. The Open Fund from Key Laboratory of Industrial Microbiology in Hubei (202209KF06), Hubei Province, Project leader.
5. The Doctoral Research Start-up Fund Project (XJ2021002001) "Construction of chitosan nanoparticle microgel system and its interfacial emulsification function", Hubei University of Technology, Project leader.
6.The High-level Talent Research Start-up Fund Project (XJ2023000602) "Research on the interface behavior mechanism of β-lactoglobulin nanocrystals and mesocrystals driven by kinetic", Hubei University of Technology, Project leader.

Representative Articles

1. **Fusheng Sun,** Zhenzhen Li, Songmei Kong, Xuxi Ma, Yantao Liu, Nan Yang. Linear and nonlinear interfacial rheology of responsive microgels at the oil-water interface. Food Hydrocolloids, 2024: 110479.
2. **Fusheng Sun**, Chuanxin Pan, Yantao Liu, Nan Yang. Carboxymethyl tamarind seed polysaccharide/chitosan complexes through electrostatic interaction stabilize high internal phase emulsions: Roles of the mass ratio and oil-water interfacial activity. LWT, 2024: 115833.
3. **Fusheng Sun,** Qian Wang, Chao Gao, Hong Xiao, Nan Yang. S Effect of extraction pH and post-extraction heat treatment on the composition and interfacial properties of peanut oil bodies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 656: 130351.
4. **Fusheng Sun,** Xiaoxue Xie, Yufan Zhang, Jiangwei Duan, Mingyu Ma, Yaqiong Wang, Ding Qiu, Xinpei Lu, Guangxiao Yang*, Guangyuan He*. Effects of cold jet atmospheric pressure plasma on the structural characteristics and immunoreactivity of celiac-toxic peptides and wheat storage proteins. International Journal of Molecular Sciences. 2020. 21(3), 1012.
5. **Fusheng Sun,** Xiaoxue Xie, Yufan Zhang, Mingyu Ma, Xinpei Lu, Guangxiao Yang*, Guangyuan He*. Wheat gliadin in ethanol solutions treated using cold air plasma at atmospheric pressure. Food Bioscience. 2020.
6. **Fusheng Sun**, Jiannan Liu, Xiyan Liu et al. Effect of the phytate and hydrogen peroxide chemical modifications on the physicochemical and functional properties of wheat starch. Food Research International. 2017, Doi: 10.1016/j.foodres.2017.07.001.
7. **Fusheng Sun**, Xiyan Liu et al. Functional characterization of TaFUSCA3, a B3-superfamily transcription factor gene in the wheat. Frontiers in plant Science. 2017, Doi: 10.3389/fpls.2017.01133.
8. Qiong Wang[#], Yin Li[#], **Fusheng Sun**[#], Xiaoyan Li, Pandi Wang, Junli Chang, Yuesheng Wang, Guangxiao Yang,* Guangyuan He*. Co-expression of high-molecular-weight glutenin subunit *1Ax1* and *puroindoline a* (*Pina*) genes in transgenic durum wheat (*Triticum turgidum* ssp *durum*) improves milling and pasting quality. BMC Plant Biology. 2019, 19 (1). (Co-first author)
9. Qiong Wang[#], Yin Li[#], **Fusheng Sun**[#], Xiaoyan Li, Pandi Wang, Guangxiao Yang*, Guangyuan He*. Expression of *puroindoline a* in Durum wheat affects milling and pasting properties. Frontiers in Plant Science. 2019, Doi: 10.3389/fpls.2019.00482. (Co-first author)