

Resume of Ying KUANG

Basic Information



School: School of Life and Health Sciences
Gender: Female
Date of Birth: 1984.06
Title: Associate Professor
Education: Ph. D
Tutor: Master degree
Interest of research: Food soft matter structure and function

Academic Background

2008.06-2012.06	Wuhan University	Ph.D. in <i>Polymer Chemistry and physics</i> , Supervisor: Academician Renxi Zhuo & Prof. Zhilan Liu
2006.09-2008.06	Wuhan University	Master degree in <i>Pharmacy</i> , Supervisor: Prof. Peng Guo
2002.09-2006.06	Wuhan University	Bachelor in <i>Pharmacy</i>

Enrollment Information

Enrollment Discipline: **Mphil/MSc** in *Food Science*
Master of Engineering in *Biology and Medicine*
Research direction: Food soft matter structure and function
Enrollment Year: 2023-2024

Representative Projects

Funding Agency	Project Title	Role
NSFC Youth Program	Study on the ordered assembly and controlled release	Principal
	of KGM-Liposome Core-shell composite carrier	Investigator
China Postdoctoral Science Foundation General Fund	Investigation of cholesterol-based long-circulating	Principal
	actively targeted liposomal anticancer drug carrier system	Investigator
Natural Science Foundation	Study on multilayer self-assembly behavior and	Principal

of Hubei Province	controlled delivery mechanism of Konjac glucomannan-zein complex system	Investigator
Doctoral Foundation of Hubei University of Technology	Formation mechanism of phenol in cigarette smoke and study on functional materials for selective reduction of phenol content	Principal Investigator
HUBU Key Laboratory of Ministry of Education Collaborative Grant	Research on intelligently induced multifunctional nanotransfer system	Principal Investigator
Hubei Key Laboratory of Industry Microbiology Collaborative Grant	Effect of microbial action on degradation performance of cellulose acetate	Principal Investigator
HBUT National “111” center for cellular Regulation and Molecular Pharmaceutics Collaborative Grant	Polyunsaturated fatty acids-loaded polysaccharide/protein-based emulsion gel system for the regulation of blood lipids	Principal Investigator
Commercial Research Fund	Study on the variation of volatile components in different insect-affected tobacco leaves	Principal Investigator
Commercial Research Fund	Research on application of evaluation standard of yarn feed uniformity	Principal Investigator
HBUT Teaching Research Project	Research on the application of PBL teaching method in food specialty teaching	Principal Investigator

Representative Articles

- [1] **Ying Kuang**, Yichen Yang, Xiaosa Wang, Menglong Liu, Tao Wang, Zheting Zhang, Kao Wu, Kai Chen, Pengpeng Deng, Xiaojun Zhao, Fatang Jiang*, Cao Li*. Improved stability and mechanical properties of citrus pectin-zein emulsion gels by double crosslinking with calcium and transglutaminase. *Industrial Crops and Products*, 2024, 211: 118305.
- [2] Qianqian Qiao, Jinyu Wang, Kai Long, Linwei Li, Jiahao Chen, Yuhao Guo, Ziqiang Xu*, **Ying Kuang***, Tianjiao Ji*, Cao Li*. A cascaded enzyme system based on the catalase-like activity of Ti₃C₂T_x MXene nanosheets for the efficient combination cancer therapy. *Nano Today*, 2024, 54:102059.

- [3] Linwei Li, Zihan Xing, Tao Liao, Jinyu Wang, Ziqiang Xu*, **Ying Kuang***, Cao Li*. Ti₃C₂T_x MXene quantum dots coated hollow manganese dioxide nanoparticles for tumor combination therapy and magnetic resonance imaging. *Materials Today Chemistry*, 2024, 39, 102171.
- [4] Tao Liao, Chang Liu, Xiaomei Wu, Jia Liu, Wenqian Yu, Ziqiang Xu, **Ying Kuang***, Cao Li*. Degradable Mesoporous Silica Nanoparticle/Peptide-Based “Trojan Horse”-Like Drug Delivery System for Deep Intratumoral Penetration and Cancer Therapy. *ACS Applied Nano Materials*, 2024, 7, 9518-9531.
- [5] Zihan Xing, Linwei Li, Tao Liao, Jinyu Wang, Yuhao Guo, Ziqiang Xu, Wenqian Yu, **Ying Kuang***, Cao Li*. A multifunctional cascade enzyme system for enhanced starvation/chemodynamic combination therapy against hypoxic tumors. *Journal of Colloid and Interface Science*, 2024, 666:244-258.
- [6] **Ying Kuang**, Si Zhao, Puming Liu, Menglong Liu Kao Wu, Yi Liu, Pengpeng Deng, Cao Li*, Fatang Jiang*. Schiff base type casein-konjac glucomannan conjugates with improved stability and emulsifying properties via mild covalent cross-linking. *Food Hydrocolloids*, 2023, 141:108733.
- [7] **Ying Kuang**, Qinjian Xiao, Yichen Yang, Menglong Liu, Xiaosa Wang, Pengpeng Deng, Kao Wu, Yi Liu, Bo Peng, Fatang Jiang*, Cao Li*. Investigation and Characterization of Pickering Emulsion Stabilized by Alkali-Treated Zein (AZ)/Sodium Alginate (SA) Composite Particles. *Materials*, 2023, 16(8):3164.
- [8] **Ying Kuang**, Puming Liu, Yichen Yang, Xiaosa Wang, Menglong Liu, Wei Wang, Tianlin Guo, Man Xiao, Kai Chen, Fatang Jiang*, Cao Li*. Study on the Influence of the Preparation Method of Konjac Glucomannan-Silica Aerogels on the Microstructure, Thermal Insulation, and Flame-Retardant Properties. *Molecules*, 2023, 28(4):1691.
- [9] Tao Liao, Zhongyin Chen, **Ying Kuang***, Zhe Ren, Wenqian Yu, Wen Rao, Linwei Li, Yun Liu, Ziqiang Xu, Bingbing Jiang*, Cao Li*. Small-size Ti₃C₂T_x MXene nanosheets coated with metal-polyphenol nanodots for enhanced cancer photothermal therapy and anti-inflammation. *Acta Biomaterialia*, 2023, 159:312-323.
- [10] Junlin Duan, Tao Liao, Xiangyu Xu, Yun Liu, **Ying Kuang***, Cao Li*. Metal-polyphenol nanodots loaded hollow MnO₂ nanoparticles with a “dynamic protection” property for enhanced cancer chemodynamic therapy. *Journal of Colloid and Interface Science*, 2023, 634:836-851.
- [11] Zhe Ren, Tao Liao, Cao Li*, **Ying Kuang***. Drug delivery systems with a “tumor-triggered” targeting or intracellular drug release property based on dePEGylation. *Materials*, 2022, 15:5290.
- [12] **Ying Kuang**, Junjun Zhai, Qinjian Xiao, Si Zhao, Cao Li*. Polysaccharide/mesoporous silica nanoparticle-based drug delivery systems: A review. *International Journal of Biological Macromolecules*, 2021, 193:457-473.
- [13] **Ying Kuang**; Lijun Chen; Junjun Zhai; Si Zhao; Qinjian Xiao; Kao Wu; Dongling Qiao; Fatang Jiang*. Microstructure, Thermal Conductivity, and Flame Retardancy of Konjac Glucomannan Based Aerogels. *Polymers*, 2021, 13(2):0-258.
- [14] **Ying Kuang**, Hui Chen, Zhongyin Chen, Lihui Wan, JiaLiu, ZiqiangXu, XueqinChen, BingbingJiang*, Cao Li*. Poly(amino acid)/ZnO/mesoporous silica nanoparticle based complex drug delivery system with a charge-reversal property for cancer therapy.

Colloids and Surfaces B-Biointerfaces, 2019, 181:461-469.

- [15] Jinling Luan, Kao Wu, Cao Li, Jia Liu, Xuewen Ni, Man Xiao, Yanglin Xu, **Ying Kuang***, Fatang Jiang*, pH-Sensitive drug delivery system based on hydrophobic modified konjac glucomannan. *Carbohydrate Polymers*, 2017, 171:9-17.
- [16] **Ying Kuang**, Jia Liu, Zhilan Liu*, Renxi Zhuo. Cholesterol-based anionic long-circulating cisplatin liposomes with reduced renal toxicity. *Biomaterials*, 2012, 33 (5):1596-1606.