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個人簡介

于希博士現任澳門科技大學副教授。她博士畢業于新加坡國立大學。目前主要研究領域為藥物納米遞送技術開發，藥物及食物快速分析與質量安全評價，藥物與腸道菌群的相互作用機制研究。她已發表百餘篇 SCI 論文，受邀擔任 *Advanced Gut & Microbiome Research*，*Journal of Future Foods*,《食品研究與開發》等雜誌編委及青年編委，主持澳門科學技術發展基金、澳門基金會項目、廣東省科技廳粵澳聯合項目等科研項目十餘項。課題組研究工作曾受邀接受海峽時報（the Strait Times），澳廣視（TDM）等媒體報導。

課題組歡迎具有藥學、生物技術、化學、中藥學等相關背景的同學加入。

教育經歷

新加坡國立大學，博士

吉林大學，碩士

吉林大學，學士

工作经历

澳門科技大學，副教授（2025-）

澳門科技大學，助理教授（2019-2025）

哈佛大學，訪問科學家（2026）

南洋理工大學，博士後研究員（2018-2019）

中國科學研究院大連化學物理研究所，研究助理（2013-2014）

精選文章/Selected Publications on Journals

1. Chen, Z., Wang, A., Qin, Y., Chen, X., Feng, X., He, G., Zhu, X., Xiao, Y., **Yu, X.***, Zhong, T.*, Zhang, K., Preparation of a thermosensitive and antibacterial in

situ gel using poloxamer-quaternized chitosan for sustained ocular delivery of Levofloxacin hydrochloride. ***International Journal of Biological Macromolecules*** 2024, 283, 137479.

2. Tao, Y., Wu, M., Su, B., Lin, H., Li, Q., Zhong, T., Xiao, Y., & **Yu, X***. (2025). Impact of Vitamin B1 and Vitamin B2 Supplementation on Anxiety, Stress, and Sleep Quality: A Randomized, Double-Blind, Placebo-Controlled Trial. ***Nutrients***, 17(11), 1821.
3. Tao, Y., Wu, M., Su, B., Lin, H., Li, Q., He, Y., Zhong, T., Xiao, Y., & **Yu, X***. (2025). Host–Gut Microbiota Interactions: Exploring the Potential Role of Vitamin B1 and B2 in the Microbiota–Gut–Brain Axis and Anxiety, Stress, and Sleep Quality***.*** ***Nutrients,*** 17(11), 1894.
4. Chen, S., Feng, X., **Yu, X.***, Editorial: Advances on innovative protein-based complexes with promising functionality, nutrient retention and encapsulation capacity. ***Frontiers in Nutrition*** 2023, 10,1217964.
5. Chen, Z., Zhu, M., Ni, W., Wu, B., Liu, T., Lin, B., Lai, L., Jing, Y., Jiang, L., Ouyang, Z., Hu, J., Zheng, H., Peng, W., **Yu, X**.*, Fan, J.*, Association of PM2.5 exposure in early pregnancy and maternal liver function: A retrospective cohort study in Shenzhen, China. ***Environmental Research*** 2024, 263, 119934.
6. Qin, Y., Chen, Z., Peng, Y., Xiao, Y., Zhong, T*., **Yu, X.***, Deep learning methods for protein structure prediction. ***MedComm–Future Medicine*** 2024, 3 (3), e96.
7. Dong, Y., Wu, T., Jiang, T., Zhu, W., Chen, L., Cao, Y., Xiao, Y., Peng, Y., Wang, L., **Yu, X***., Zhong, T*., Chitosan-coated liposome with lysozyme-responsive properties for on-demand release of levofloxacin. ***International Journal of Biological Macromolecules*** 2024, 269, 132271.
8. Li, X., Su, L., Zhang, X., Chen, Q., Wang, Y., Shen, Z., Zhong, T., Wang, L., Xiao, Y., Feng, X.*, **Yu, X.,*** Recent Advances on the Function and Purification of Milk Exosomes: A Review. ***Frontiers in Nutrition*** 2022, 9, 871346.
9. Zhao, X., Wang, A., Zhai, L., Gao, J., Lyu, S., Jiang, Y., Zhong, T., Xiao, Y., **Yu, X***., Magnetic solid phase extraction coupled to HPLC-UV for highly sensitive analysis of mono-hydroxy polycyclic aromatic hydrocarbons in urine. ***Analytica***

Chimica Acta 2024, 1285, 342020.

10. Lin, H., Li, Z., Li, Q., Feng, X., Tao, Y., Su, B., Zhong, T., Xiao, Y., & **Yu, X***. (2026). Physicochemical properties and antioxidative stability of curcumin-loaded oleogel made with ethyl cellulose enhanced by soy lecithin. ***Food Chemistry***, 151618.
11. Zhang, Y., Chen, Z., Coghi, P., Feng, X., Li, Z., Zhong, T., Xiao, Y., & **Yu, X***. (2026). Machine learning-assisted detection of Sudan I in chili powder using FT-IR coupled with magnetic molecular imprinting extraction. ***npj Science of Food***.
12. Li, Z., Niu, X., Cao, Y., Tang, S., Zhang, Y., Hai, J.,Feng, X., Li, M., Li, J., Zhong, T., Xiao, Y., & **Yu, X***. (2026). Chitosan and chitosan derivative-based composite packaging for food preservation: Preparation strategies, performance modulation, and application prospects. ***International Journal of Biological Macromolecules***, 154373.
13. Si, X., Li, Z., Chen, Y., Li, B., Zhang, L., Hai, J., Zhang, Y., Feng, X., Zhong, T., Xiao, Y., & **Yu, X***. (2026). Succinylated nori protein–alginate complex particles prepared using temperature-controlled ultrasonication for the formation of high internal phase Pickering emulsion gels as plant-based fat analogues. ***Ultrasonics Sonochemistry***, 108029.
14. He, Y., Li, Z., Feng, X., Liang, D., Liu, L., He, G., Zhong, T., Xiao, Y., & **Yu, X*.** (2026). Carbon Quantum Dots in Food Analysis: Challenges in Real Matrices, Recognition Mechanisms, and Optimization Strategies. ***Food Bioscience***, 109158.
15. Guo, Y., Luo, Y., Liu, X., Lai, H., Liu, Y., Cui, X., Dong, M., Luo, X., Wu, C., & **Yu, X***. (2026). The association between food group-based inflammatory score and cardiometabolic disorders in Ganzhou City of China. ***Scientific Reports***.
16. Li, X., Wang, A., Chen, S., Qiu, Y., Qian, C., Zhang, X.*, & **Yu, X***. (2026). A novel paper-based biosensor for point-of-care testing of dengue virus nucleic acids utilizing RAA & CRISPR/Cas technology. ***Microchemical Journal,*** 117890.
17. Chen, Y., Yan, Z., Chen, Y., Guo, Z., Feng, X., Liu, X., Zhong, T., Xiao, Y., & **Yu, X***. (2026). Techniques and Applications for the Inhibition of Amine Compounds Formation in Food Matrices: Mechanism Insights, Practical Implications, and

Future Perspectives. ***Food Reviews International***, 1-29.

18. Tao, X., Wu, X., Wu, H., Tu, L., Dong, M., Xiao, Y., **Yu, X.***, & Zhong, T*. (2026). A structural roadmap to gut health: A comprehensive review of edible insect chitin–protein complexes as alternative protein-derived, structure-specific prebiotics. ***International Journal of Biological Macromolecules***, 151312.
19. Chen, Z., Ouyang, Z., Ni, W., Lin, B., Zheng, H., Jiang, L., Wu, B., Lai, L., Zhu, M., Jing, Y., Liu, Z., **Yu, X.,*** & Fan, J*. (2026). Combined effects of nitrogen dioxide and ozone air pollution on maternal liver function during pregnancy: a birth cohort study in China. ***Environmental Health and Preventive Medicine,*** 31, 38-38.
20. Guo, Z., Yan, Z., Chen, Y., Ieong, W. I., Zhong, T., Xiao, Y., & **Yu, X***. (2025). Protective role of natural saccharides in frozen animal food formulations: Enhancing cryopreservation during cold treatment. ***International Journal of Biological Macromolecules***, 321, 146222.
21. Gao, J., Zhao, X., He, Y., Xu, W., Zhou, Y., Feng, X., He, G., Zhong, T., Peng, Y., Xiao, Y., **Yu, X***. (2025). Low temperature clean-up combined with magnetic solid phase extraction for rapid and sensitive detection of crystal violet and malachite green in eels. ***Microchemical Journal***, 216, 114787.
22. Guo, Z., Feng, X., Han, J., Zhong, T., Zheng, Z., Xiao, Y., & **Yu, X.*** (2025). Inhibitory effects of κ-carrageenan oligosaccharides on histamine formation in Atlantic mackerel (Scomber scombrus) during cold storage. ***Food Bioscience***, 64, 105921.
23. Guo, Y., Zhang, Y., Han, L., Wang, Y., Zhong, T., Xiao, Y., Lam, L., Wu, C.*, & **Yu, X***. (2025). Study on fatigue, sleep quality and PTSD symptoms and influencing factors among prevention and control workers during the COVID-19 outbreak in China. ***Scientific Reports***, 15(1), 35414.
24. Si, X., Si, Y., Lu, Z., Zhong, T., Xiao, Y., Wang, Z., & **Yu, X***. (2025). Mechanisms of fatigue and molecular diagnostics: The application of bioactive compounds in fatigue relief research. ***Food Bioscience***, 68, 106523.
25. Guo, Y., Zhu, Y., Wang, Y., Yin, H., Han, L., Zhong, T., Xiao, Y., Lam, L., **Yu, X***.

(2025). The influence of anti-COVID-19 measures on the incidence of hand-foot-mouth disease in Zhanggong district of Ganzhou city in China. ***Heliyon***, 11(2).

26. He, G., Xie, R., Hou, X.*, **Yu, X.***, Qiu, S., Qin, S., Wang, F., Chen, X., Safety risk of using asomate to reduce acid in Citrus production. ***Journal of Food Composition and Analysis*** 2024, 134, 106537.
27. Guo, Z., Feng, X., He, G., Yang, H., Zhong, T., Xiao, Y., **Yu, X.***, Using bioactive compounds to mitigate the formation of typical chemical contaminants generated during the thermal processing of different food matrices. ***Comprehensive Reviews in Food Science and Food Safety*** 2024, 23 (5), e13409.
28. Zhao, X., Zhai, L., Chen, J., Zhou, Y., Gao, J., Xu, W., Li, X., Liu, K., Zhong, T., Xiao, Y., **Yu, X***., Recent Advances in Microfluidics for the Early Detection of Plant Diseases in Vegetables, Fruits, and Grains Caused by Bacteria, Fungi, and Viruses. ***Journal of Agricultural and Food Chemistry*** 2024, 72 (28), 15401-15415.
29. Wang, A., Chen, Z., Feng, X., He, G., Zhong, T., Xiao, Y., **Yu, X***., Magnetic-gold nanoparticle-mediated paper-based biosensor for highly sensitive colorimetric detection of food adulteration. ***Journal of Hazardous Materials*** 2024, 475, 134849.
30. He, Y., **Yu, X***., Review on the application of upconversion nanomaterials in heavy metal detection. ***Food Health*** 2024, 6(3), 11.
31. Zhao, X., Gao, J., Zhai, L., **Yu, X.***, Xiao, Y*. Recent Evidence on Polycyclic Aromatic Hydrocarbon Exposure ***Healthcare*** 2023, 11(13), 1958.
32. Zhang, Y., Qiu, J., Yang, K., Lu, Y., Xu, Z., Yang, H., Xu, Y., Wang, L., Lin, Y., Tong, X., He, J., Xiao, Y., Sun, X., Huang, R., **Yu, X.***, Zhong, T.*, Generation, mechanisms, kinetics, and effects of gaseous chlorine dioxide in food preservation. ***Comprehensive Reviews in Food Science and Food Safety*** 2023, 22 (4), 3105-3129.
33. Zhao, X., Feng, X., Chen, J., Zhang, L., Zhai, L., Lv, S., Ye, Y., Chen, Y., Zhong, T., **Yu, X.*,** Xiao, Y.*, Rapid and Sensitive Detection of Polycyclic Aromatic Hydrocarbons in Tea Leaves Using Magnetic Approach. ***Foods*** 2023, 12 (11),

2270.

34. Lu, Y., Li, Z., Chen, Q., Fan, Y., Wang, J., Ye, Y., Chen, Y., Zhong, T., Wang, L., Xiao, Y., Zhang, D.*, **Yu, X.***, Association of working hours and cumulative fatigue among Chinese primary health care professionals. ***Frontiers in Public Health*** 2023, 11, 1193942.
35. Wang, A., Feng, X., He, G., Xiao, Y., Zhong, T., **Yu, X.***, Recent advances in digital microfluidic chips for food safety analysis: Preparation, mechanism and application. ***Trends in Food Science & Technology*** 2023, 134, 136-148.
36. Tao, A., Zhang, H., Duan, J., Xiao, Y., Liu, Y., Li, J., Huang, J., Zhong, T.*, **Yu, X.***, Mechanism and application of fermentation to remove beany flavor from plant-based meat analogs: A mini review. ***Frontiers in Microbiology*** 2022, 13,1070773.
37. Lu, Y., Li, Z., Fan, Y., Wang, J., Zhong, T., Wang, L., Xiao, Y., Zhang, D.*, Chen, Q.*, **Yu, X.*,** The Mediating Role of Cumulative Fatigue on the Association between Occupational Stress and Depressive Symptoms: A Cross-Sectional Study among 1327 Chinese Primary Healthcare Professionals. ***International Journal of Environmental Research and Public Health*** 2022, 19 (23), 15477.
38. **Yu, X.**, Zhong, T.*, Zhang, Y., Zhao, X., Xiao, Y.*, Wang, L., Liu, X., Zhang, X., Design, Preparation, and Application of Magnetic Nanoparticles for Food Safety Analysis: A Review of Recent Advances. ***Journal of Agricultural and Food Chemistry*** 2021, 70 (1), 46-62.
39. **Yu, X**., Zuo, T*., Editorial: Food Additives, Cooking and Processing: Impact on the Microbiome. ***Frontiers in Nutrition*** 2021, 8, 731040.
40. **Yu, X**., Lim, C. Y. X., Dong, B., Hadinoto, K*., Development of magnetic solid phase extraction platform for the purification of bioactive γ-glutamyl peptides from garlic (*Allium sativum*). ***LWT-Food Science and Technology*** 2020, 127, 109410.
41. **Yu, X**., Lee, J. K., Liu, H., & Yang, H. Synthesis of magnetic nanoparticles to detect Sudan dye adulteration in chilli powders. ***Food Chemistry*** 2019, 299, 125144.

42. **Yu, X**., Li, Z., Zhao, M., Lau, S. C. S., Ru Tan, H., Teh, W. J., Yang, H., Zheng, C., Zhang, Y. Quantification of aflatoxin B1 in vegetable oils using low temperature clean-up followed by immuno-magnetic solid phase extraction. ***Food Chemistry*** 2019, 275, 390-396.
43. **Yu, X.**; Li, Y.; Ng, M.; Yang, H.; Wang, S., Comparative study of pyrethroids residue in fruit peels and fleshes using polystyrene-coated magnetic nanoparticles based clean-up techniques. ***Food Control*** 2018, 85, 300-307.
44. **Yu, X**.; Ang, H. C.; Yang, H.; Zheng, C.; Zhang, Y., Low temperature cleanup combined with magnetic nanoparticle extraction to determine pyrethroids residue in vegetables oils. ***Food Control*** 2017, 74, 112-120.
45. **Yu, X.**; Yang, H., Pyrethroid residue determination in organic and conventional vegetables using liquid-solid extraction coupled with magnetic solid phase extraction based on polystyrene-coated magnetic nanoparticles. ***Food Chemistry*** 2017, 217, 303-310.
46. **Yu, X**.; Sun, Y.; Jiang, C.-Z.; Gao, Y.; Wang, Y.-P.; Zhang, H.-Q.; Song, D.-Q., Magnetic solid-phase extraction and ultrafast liquid chromatographic detection of Sudan dyes in red wines, juices, and mature vinegars. ***Journal of Separation Science*** 2012, 35 (23), 3403-3411.
47. **Yu, X**.; Sun, Y.; Jiang, C.; Sun, X.; Gao, Y.; Wang, Y.; Zhang, H.; Song, D., Magnetic solid-phase extraction of five pyrethroids from environmental water samples followed by ultrafast liquid chromatography analysis. ***Talanta*** 2012, 98, 257-264.

書籍專著/Books and Chapters

1. Fu, C., Guo, H., You, C., & **Yu, X.** (Eds.). (2023). Recent Advances and Product Opportunities in the Technology of Proteins, Probiotics and Prebiotics.
2. Safety and Practice for Organic Food, Chapter 5: From a Perspective of Nutrition: Importance of Organic Foods over Conventional Counterparts. Zheng Y; **Yu X**; Yang H*; Wang S. Elsevier. 2019. ISBN: 978-0-12-812060-6.

專利

1. 于希；陳子晗；鐘恬；張康，一種眼用制劑。發明專利：CN202411120834.6（申請號）

2. 于希；林恒；黎芊梓；馮瀟，一種含抗氧化劑的復合顆粒及其制備方法和應用。發明專利：CN202510632153.6（申請號）

3. 于希；黎芊梓；馮瀟，一種高內相 Pickering 乳液用復合蛋白穩定劑及其制備方法和應用。發明專利：CN202511083487.9（申請號）

4. 张茉琰；钟恬；于希；乐怡，一种固定化酶反应装置。實用新型專利：ZL202520966284.3（授權號）

5.于希；王安宇；王子嫣；陳于同，一種用于檢測目標基因含量的組合產品以及方法。發明專利：CN202410742144.8（申請號）

6. 于希；何宇鴻，基于磁性納米顆粒與碳量子點的黃曲霉產毒基因檢測方法。發明專利：CN202610570080.7（申請號）

7.于希；張亦辰；李占明，基于納米粒子與機器學習的辣椒粉中蘇丹紅快速檢測方法。發明專利：CN202511772810.3（申請號）

8. 于希；郭子龍，一種抑制組胺生成的組合物。發明專利：CN202411429822.1（申請號）

專業認證和獎項

1. 澳門學技術發展基金年度研究生科技研發獎，論文導師 (2025)

2.“莫干山杯”全國大學生標準化奧林匹克競賽二等獎，指導教師 (2025)

3. “天食杯”第四屆食品研究與開發創新創意大賽全國三等獎，指導教師 (2024)

4. MedComm-Future Medicine“最佳论文”，通訊作者 （2024）

5. 新加坡國立大學食品科技係“年度最優秀畢業生”(2019)

6. 吉林大學研究生國家獎學金 (2013)

專業協會會員資格：

灣區標準評審專家，澳質品牌促進中心評審專家，澳門高等教育發展促進會會員，橫琴粵澳深度合作區澳質品牌促進中心評審專家，橫琴粵澳深度合作區琴澳健康教育專家團成員，廣東省環境科學學會環境暴露與健康風險控制專業委員會委員，中國食品科學技術學會會員，澳門科技大學學生事務處委員