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### 個人簡介

于希博士現任澳門科技大學醫學院副教授。她本科及碩士畢業於吉林大學，博士畢業于新加坡國立大學，並於南洋理工大學完成博士後研究。目前主要研究領域為食品及中藥安全分析、納米傳感器製造、活性成分遞送、植物基創新材料研發、AI 輔助的分析技術開發等，已發表九十餘篇 SCI 論文在各類行業頂刊上，包括 *Trends in Food Science & Technology*, *Food Chemistry*, *Journal of Hazardous Materials*, *Journal of Agricultural and Food Chemistry*, *Analytical Chemistry* 等。她受邀擔任《食品研究與開發》，《輕工學報》青年編委，《*Advanced Gut & Microbiome Research*》編委，《*Frontiers in Nutrition*》，*Foods*, *Healthcare*, *International Journal of Molecular Science* 客座編輯。她兼任澳門科技大學學生事務處委員，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。她主持的研究工作曾被海峽時報 (the Strait Times)，澳廣視 (TDM) 等媒體報導。她主持澳門科學技術發展基金 3 項、澳門基金會項目 1 項、四川省國際科技創新合作項目 1 項，珠海市產學研合作項目 1 項，澳門科技大學基金會項目 2 項，重點參研粵港澳大灣區聯合實驗室建設項目 1 項，豐益國際金龍魚營養與安全研究基金 1 項。

課題組歡迎具有食品科技、化學、材料學、藥學、生物科學等相關背景的同學申請碩士、博士研究生。

### 教學領域

營養學導論、基礎化學、分析化學、材料科學等

### 研究領域

食品及中藥安全分析、納米傳感器製造、活性成分遞送、植物基創新材料研發、AI 輔助的分析技術開發

### 教育經歷

新加坡國立大學食品科技系，博士

吉林大學分析化學系，碩士

吉林大學化學系，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）

南洋理工大學，博士後研究員（2018-2019）

中科院大連化學物理研究所，研究助理（2013-2014）

### 精選文章

1. Guo, Z., Yan, Z., Chen, Y., leong, 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.
2. 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.
3. Guo, Z., Feng, X., Han, J., Zhong, T., Zheng, Z., Xiao, Y., & **Yu, X.\*** (2025).  
Inhibitory effects of  $\kappa$ -carrageenan oligosaccharides on histamine formation in  
Atlantic mackerel (*Scomber scombrus*) during cold storage. *Food Bioscience*,  
64, 105921.
4. 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.

5. 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.
6. Zhang, L., Chen, Y., Yang, Q., Guo, J., Zhou, S., Zhong, T., Xiao, Y., Yu, X., Feng, K., Peng, Y., Han, Z., Feng, F., Wang, L\*. (2025). The Impact of Dietary Fiber on Cardiovascular Diseases: A Scoping Review. *Nutrients*, 17(3), 444.
7. 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).
8. 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.
9. 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.

10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. He, Y., Yu, X.\*, Review on the application of upconversion nanomaterials in  
heavy metal detection. ***Food Health*** 2024, 6(3), 11.
18. Zhao, X., Gao, J., Zhai, L., Yu, X.\*, Xiao, Y\*. Recent Evidence on Polycyclic  
Aromatic Hydrocarbon Exposure ***Healthcare*** 2023, 11(13), 1958.
19. 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.
20. Wu, T., Zhu, W., Chen, L., Jiang, T., Dong, Y., Wang, L., Tong, X., Zhou, H., Yu, X.,  
Peng, Y., Wang, L., Xiao, Y., Zhong, T.\*, A review of natural plant extracts in  
beverages: Extraction process, nutritional function, and safety evaluation. ***Food  
Research International*** 2023, 172, 113185.
21. 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.

22. 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.
23. 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.
24. 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.
25. Ahmad, T., Li, G., Wang, J., Li, M., Xiao, Y., Yu, X., Zheng, Y., Moosa, A., Nie, C., Liu, Y.\*, First Report of Bacterial Leaf Spot of Ficus benghalensis Caused by Pseudomonas cichorii in Pakistan. *Plant Disease* 2023, 107 (2), 552.
26. Fu, C., Yu, X., Guo, H.\*, You, C.\*, Du, J.\*, Recent Advances and Product Opportunities in the Technology of Proteins, *Frontiers in Nutrition* 2023, 10, 1126929.
27. 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.
28. 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.
29. 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.
30. 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.
31. Yu, X., Zuo, T\*., Editorial: Food Additives, Cooking and Processing: Impact on the Microbiome. *Frontiers in Nutrition* 2021, 8, 731040.
32. Yu, X., Lim, C. Y. X., Dong, B., Hadinoto, K\*., Development of magnetic solid phase extraction platform for the purification of bioactive  $\gamma$ -glutamyl peptides from garlic (*Allium sativum*). *LWT-Food Science and Technology* 2020, 127, 109410.
33. 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.
34. 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.

35. **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.
36. **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.
37. **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.
38. **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.
39. **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.

#### 專利

1. National invention patent: A method for the prediction of fish fillet freshness.

Application No.: 202411586894.7. Inventors: Yu, X, Lu, Y., Wang, Y.

2. National invention patent: A composition that inhibits histamine production.

Application No.: 202411429822.1. Inventors: Yu, X, Guo, Z.

3. National invention patent: A kind of microcapsule for inhibiting the beany flavor of protein and its application. Application No.: 202411134245.3. Inventors: Yu, X, Chen, Z., Zhong, T., Zhang, K.

4. National invention patent: A formulation for ocular use. Inventors: Yu, X,

5. National invention patent: Novel kit and method for the detection of target DNA.

Application No.: 202410742144.8. Inventors: Yu, X, Wang, A., Wang, Z., Chen, Y.

6. National invention patent: Novel kit and method for the detection of adulterants in meat products. Application No.: 202410742128.9. Inventors: Yu, X, Wang, A., Wang, Z., Chen, Y.

7. National invention patent: Novel detection method for Sudan dye pollution in water. Patent No.: ZL201110157977.0, Inventors: Song D, Sun Y, Jiang C, Yu X, Zhang L, Sun X, Gao Y.

#### **專業認證和獎項**

1. 澳門科學技術發展基金年度研究生科技研發獎，論文導師
2. “莫千山杯”全國大學生標準化奧林匹克競賽二等獎，指導教師
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
4. 新加坡國立大學食品科技系“年度最優秀畢業生”
5. 吉林大學研究生國家獎學金

#### **專業協會會員資格：**

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。