

# 个人简历

## 个人信息

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## 教育背景

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**2016-2020** 博士, 食品科学与技术学院 (偏向有机化学), 理学系, 新加坡国立大学。

**2011-2015** 学士, 食品科学与工程, 西北农林科技大学 (211 & 985), 中国陕西

## 发表文章&专利

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### 第一作者/通讯作者

(7) **Yang, X.**, Lim, S., Lin J., Wu J., Tang H., Zhao F., Liu, F., Sun, C., Shi X., Kuang, Y., Toy, J., Du, K., Zhang, Y., Wang, X., Sun, M., Song, Z., Wang, T., Wu, J., K. N. Houk,\* Huang, D.,\* Oxygen Mediated Oxidative Couplings of Flavones in Alkaline Water. *Nature Communication*. (In Press)

(6) **Yang, X.**, Wang, T., Žuvela, P., Sun, M., Xu, C., Zheng, H., Wang, X., Jing, L., Du, K., Wang, S. and Wong, M.W., (2022). Three-Dimensional Quantitative Structure and Activity Relationship of Flavones on Their Hypochlorite Scavenging Capacity. *Journal of Agricultural and Food Chemistry*. 70(28), 8799-8807.

(5) **Yang, X.**, Leong, J.L.K., Sun, M., Jing, L., Zhang, Y., Wang, T., Wang, S. and Huang, D., (2022). Quantitative Determination of Ethylene Using a Smartphone-Based Optical Fiber Sensor (SOFS) Coupled with Pyrene-Tagged Grubbs Catalyt. *Biosensors*, 12(5), p.316.

(4) **Yang, X.**, Wang, X., Lin, J., Lim, S., Cao, Y., Chen, S., Xu, P., Xu, C., Zheng, H., Fu, K.C. and Kuo, C.L., (2022). Structure and Anti-Inflammatory Activity Relationship of Ergostanes and Lanostanes in *Antrodia cinnamomea*. *Foods*, 11(13), p.1831.

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(2) **Yang, X.**, Wang, T., Guo, J., Sun, M., Wong, M. W., & Huang, D. (2019). Dietary flavonoids scavenge hypochlorous acid via chlorination on A-and C-rings as primary reaction sites: Structure and reactivity relationship. *Journal of agricultural and food chemistry*, 67(15), 4346-4354.

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### 共同作者

(9) Wang, X., Cao, Y., Chen, S., Lin, J., **Yang, X.** and Huang, D., (2022). Structure–Activity Relationship (SAR) of Flavones on Their Anti-Inflammatory Activity in Murine Macrophages in Culture through the NF-κB Pathway and c-Src Kinase Receptor. *Journal of Agricultural and Food Chemistry*.

(8) Wang, X., Cao, Y., Jing, L., Chen, S., Leng, B., **Yang, X.**, ... & Huang, D. (2021). Three-Dimensional RAW264. 7 Cell Model on Electrohydrodynamic Printed Poly (ε-Caprolactone) Scaffolds for In Vitro Study of Anti-Inflammatory Compounds. *ACS Applied Bio Materials*, 4(11), 7967-7978.

(7) Sun, M., Wang, T., **Yang, X.**, Yu, H., Wang, S., & Huang, D. (2021). Facile mitochondria localized fluorescent probe for viscosity detection in living cells. *Talanta*, 225, 121996.

(6) Zhang, Y., **Yang, X.**, Tang, H., Liang, D., Wu, J., & Huang, D. (2020). Pyrenediones as versatile photocatalysts for oxygenation reactions with in situ generation of hydrogen peroxide under visible light. *Green Chemistry*. 22, 22-27

(5) Žuvela, P., David, J., **Yang, X.**, Huang, D., & Wong, M. W. (2019). Non-Linear Quantitative Structure–Activity Relationships Modelling, Mechanistic Study and In-Silico Design of Flavonoids as Potent

Antioxidants. *International journal of molecular sciences*, 20(9), 2328.

(4) Lin, Y., Yang, X., Lu, Y., Liang, D., & Huang, D. (2019). Isothiocyanates as H<sub>2</sub>S donors triggered by cysteine: Reaction mechanism and structure and activity relationship. *Organic letters*, 21(15), 5977-5980.

(3) Sun, M., Yang, X., Zhang, Y., Wang, S., Wong, M. W., Ni, R., & Huang, D. (2018). Rapid and visual detection and quantitation of ethylene released from ripening fruits: the new use of Grubbs catalyst. *Journal of agricultural and food chemistry*, 67(1), 507-513.

(2) Sun, M., Krishnakumar, S., Zhang, Y., Liang, D., Yang, X., Wong, M. W., ... & Huang, D. (2018). Singlet oxygen probes made simple: Anthracenylmethyl substituted fluorophores as reaction-based probes for detection and imaging of cellular <sup>1</sup>O<sub>2</sub>. *Sensors and Actuators B: Chemical*, 271, 346-352.

(1) Liang, D., Zhang, Y., Wu, Z., Chen, Y. J., Yang, X., Sun, M., & Huang, D. (2018). A near infrared singlet oxygen probe and its applications in in vivo imaging and measurement of singlet oxygen quenching activity of flavonoids. *Sensors and Actuators B: Chemical*, 266, 645-654.

专利

Yang Xin, Huang Dejian, Du Ke, Toy, Yi Hui Joanne. Methods to Synthesize Flavonoid Dimers and Oligomers and the Use Thereof. International Filing No: PCT/SG2021/050779, Dec 2021.

## 研究兴趣

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- 对人体健康有益的植物生物活性化合物，尤其是膳食抗氧化剂，淀粉水解酶抑制剂。
- 发光分子和纳米探针：用于感测生物和环境方面的活性氧（NO<sub>2</sub>, NO, SO<sub>2</sub>, ClO<sup>-</sup>, H<sub>2</sub>O<sub>2</sub>, <sup>1</sup>O<sub>2</sub>）。
- 仿生合成具有生物活性的天然产物：合成自然界中存在的具有多种生物活性的结构复杂的黄酮类物质。
- 食品风味成分形成研究：对食品中风味成分的形成机理研究，例如硫化氢，硫醇等。
- 可见光介导的精细化学合成：Pyrenediones 作为促进氧合反应的多功能光催化剂。

## 期刊任职

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2022.04 - 2023.09 担任 MDPI 联合专刊客座编辑，主题为：Bioactive Compounds with Application Potentials in Nutraceuticals and Nutricosmetics: Focus on Mechanism of Action and Application Science.