



陈小威，男，1987年9月，博士，河南工业大学青年骨干教师、校聘副教授，荣获益海嘉里金龙鱼青年教师奖等。主持包括国家自然科学基金青年基金和企业横向项目7项，作为项目骨干承担国家自然科学基金等国家级项目3项。发表论文40余篇，其中SCI论文34篇，多篇被TOP期刊推为封面报道（Cover paper）和热点论文（Hot article），申请国家发明专利7项，授权2件，担任10余个国内外知名期刊审稿专家以及国家自然科学基金评审专家。

通讯地址：河南工业大学粮油食品学院

联系电话：18623718253

电子邮箱：fexwchen@haut.edu.cn/chexiaowei8252@hotmail.com

### 教育与工作经历

2017/12-至今，河南工业大学，粮油食品学院，讲师（校聘副教授）；

2014/09-2017/12，华南理工大学，食品科学与工程学院，工学博士；

2011/09-2014/06，河南工业大学，粮油食品学院，工学硕士；

2007/09-2011/06，河南工业大学，粮油食品学院，工学学士。

### 研究领域与方向

油脂加工与深加工；脂质化学与品质控制；新型食品专用油脂及食品功能因子递送载体开发。

### 教授课程

油脂深加与制品；油脂工厂设计；油脂品质分析实验。

### 研究成果

#### （一）主要科研项目

- (1) 国家自然科学基金面上项目，31771923，基于天然皂苷油水界面自组装的油脂凝胶结构化及其调控机理，2019/01至2021/12，23万元，主持，在研。
- (2) 河南工业大学科学研究基金，2018QNJH03，皂皮皂苷等级多控室乳液的设计及其食品功能因子输送，2019/01至2021/12，5万元，主持，在研。
- (3) 河南工业大学高层次人才基金项目，生物表面活性剂界面修饰稳定皂皮皂苷基乳液及其油凝胶，2019/01至2021/12，10万元，主持，在研。
- (4) 广东省天然产物绿色加工与产品安全重点实验室基金项目，油水界面诱导天然皂皮皂苷界面组装机制及其调控机理的研究研究，2018/11/16-2019/12/15，5万元，主持，已完成。

#### （二）近三年代表论文

- (1) **Chen X W**, Sun S D, Ma C G, et al. Oil-Water Interfacial-Directed Spontaneous Self-Assembly of Natural Quillaja Saponin for Controlling Interface Permeability in Colloidal Emulsions. *Journal of Agricultural and Food Chemistry*, 2020, 68(47): 13854-13862. (SCI 一区 TOP, IF=4.192)
- (2) **Chen X W**, Ning X Y, Yang X Q. Fabrication of novel hierarchical multicompartiment highly stable triple emulsions for the segregation and protection of multiple cargos by spatial co-encapsulation. *Journal of Agricultural and Food Chemistry*, 2019, 67(39): 10904-10912. (封

面文章, SCI 一区 TOP, IF= 4.192)

- (3) **Chen X W**, Yang X Q. Characterization of orange oil powders and oleogels fabricated from emulsion templates stabilized solely by a natural triterpene saponin *Journal of Agricultural and Food Chemistry*, 2019, 67(9): 2637-2646. (封面文章, SCI 一区 TOP, IF= 4.192)
- (4) **Chen X W**, Ning X Y, Zou Y, et al. Multicompartment emulsion droplets for programmed release of hydrophobic cargoes. *Food & Function*, 2019, 10(8): 4522-4532. (封面文章, SCI 一区 TOP, IF= 4.171)
- (5) Ma, C. G., Wang, Y. D., Huang, W. F., Liu, J., & **Chen, X. W\***. Molecular reaction mechanism for elimination of zearalenone during simulated alkali neutralization process of corn oil. *Food Chemistry*, 2020, 307, 125546. (SCI 一区 TOP, IF= 6.306)
- (6) **Chen X W\***, Shang-De Sun, Guo-Long Yang and Chuan-Guo Ma. (2020) Engineering phytosterol-based oleogels for potential application as sustainable petrolatum replacement. *RSC Advances* 2020, 10, 244-252.( SCI 二区, IF= 3.119)
- (7) Ma, C. G., Zhao, M., Si, T. L., & **Chen, X. W.\*** Comparative study of adsorption polysaccharide on bioactive components and in vitro antioxidant activity of sea buckthorn (*Hippophaë rhamnoides* L.) pulp oil. *LWT-Food Science and Technology*, <https://doi.org/10.1016/j.lwt.2021.110896>.(SCI 一区 TOP, IF= 4.006)
- (8) Bai G, Ma C G, **Chen, X. W.\*** Effect of unsaturation of free fatty acids and phytosterols on the formation of esterified phytosterols during deodorization of corn oil. *Journal of the Science of Food and Agriculture*, 2020. <https://doi.org/10.1002/jsfa.10900> (SCI 一区 TOP, IF= 2.614)
- (9) Ma, C. G., Ma, J. X., Li, L. J., & **Chen, X. W.\*** Evaluation of 3-Monochloropropanol Esters and Glycidyl Esters during the Production and Concentration of Diacylglycerol by Two-stage Short-path Molecular Distillation. *LWT - Food Science and Technology*, 2021, 111145. (SCI 一区 TOP, IF= 4.006)
- (10) Hu, Q. H., Ning, X. Y., Ma, C. G., & **Chen, X. W.\*** Comparative Study on Functional Components, Physicochemical Properties and Antioxidant Activity of *Amaranthus Caudatus* L. Oils Obtained by Different Solvents Extraction. *Journal of Oleo Science*, 2021, <https://doi.org/10.5650/jos.ess20157>. (SCI 三区, IF= 1.304)
- (11) **Xiao-Wei Chen**, Dan-Yang Luo, Ya-Jun Chen, Jin-Mei Wang, Jian Guo, Xiao-Quan Yang. Dry fractionation of surface abrasion for polyphenol-enriched buckwheat protein combined with hydrothermal treatment. *Food Chemistry*, 2019, 285: 414–422. (SCI 一区 TOP, IF= 6.306)
- (12) **Xiao-Wei Chen**, Ya-Jun Chen, Jin-Yu Li, Yong-Hui Wang, Xiao-Quan Yang. Enzyme-assisted development of biofunctional polyphenol-enriched buckwheat protein: physicochemical properties, in vitro digestibility, and antioxidant activity. *Journal of the Science of Food and Agriculture* 2019, 99: 3176–3185. (SCI 一区 TOP, IF= 2.614)
- (13) Jia-Feng Chen<sup>1</sup>, **Xiao-Wei Chen<sup>1</sup>**(共同一作), Jian Guo and Xiao-Quan Yang. Zein-based core-shell microcapsules for the potential delivery of algae oil and lipophilic compounds. *Food*

*Funct.*, 2019, 10, 1504-1512. (SCI 一区 TOP, IF= 4.171)

- (14) Meng-Ping Wang<sup>1</sup>, **Xiao-Wei Chen**<sup>1</sup>(共同一作), Jian Guo, Juan Yang, Jin-Mei Wang, Xiao-Quan Yang. Stabilization of foam and emulsion by subcritical water-treated soy protein: Effect of aggregation state. *Food Hydrocolloids* 2019, 87: 619–628.(SCI 一区 TOP, IF= 7.053)
- (15) **Chen, X. W.**, Yang D. X., Guo, J., Ruan, Q. J., Yang, X. Q. *Quillaja* saponin-based hollow salt particles as solid carriers for enhancing aroma sensory with reduced sodium intake. *Food & Function*. 2018, 9, 191-199. (热点文章, SCI 一区 TOP, IF=4.171)
- (16) Shangde Sun, **Chen, X. W.**, Cong Jiang. Enhanced synthesis of feruloylated acylglycerols by the lipase-catalyzed transesterification of glyceryl monoferulate with different acyl donors using ionic liquids as reaction solvents. *Journal of Biotechnology*, 2018, 280, 31–37. (SCI 二区, IF= 3.503)
- (17) **陈小威**, 宁雪莹, 马传国. 天然皂苷自组装及其对食品胶体功能特性影响的研究进展[J]. 现代食品科技, 2019, 35(10): 292-302. (中文核心)
- (18) **陈小威**、尹文俊、李金玉、杨晓泉、马传国. 基于天然皂皮皂苷界面自组装包埋制备粉末鱼油及其特性研究[J]. 河南工业大学学报(自然科学版), 2020, 197(05): 7-14. (中文核心)
- (19) 胡起华, 马传国, **陈小威**, 宁雪莹, 刘怡真. 乙基纤维素油凝胶及其在食品中应用的研究进展. 中国油脂, 2020, 45(1): 115-120. (中文核心)

### (三) 发明专利

申请专利 7 项，授权 2 项。

### 奖励与荣誉

河南工业大学青年骨干教师

2019-2020 年连续两年指导本科生获得河南工业大学优秀毕业论文

河南工业大学教学大奖赛三等奖 1 项，课程思政教学大奖赛三等奖 1 项

益海嘉里青年教师奖教金