



教师姓名 付阳

所在系部 粮食工程系

职称/职务 讲师

电子邮箱 15972083170@163.com

讲授课程 《食品安全学》、《食品生物技术》、《食品营养与健康》

个人简介

博士、讲师。湖北省“三区”人才科技人员，主要从事面制食品开发及谷物加工技术研究。

教育经历

2009.09-2013.06: 华中农业大学，生命科学技术学院，本科

2013.09-2019.06: 华中农业大学，生命科学技术学院，硕博连读

工作经历

2019.07-至今: 武汉轻工大学食品科学与工程学院

研究方向

- [1] 面制食品保鲜及产品创制
- [2] 食品储藏及腐败机理
- [3] 功能食品研发

主持的代表性科研项目

- [1] 湖北省自然科学基金青年项目，2023年
- [2] 湖北省教育厅科学技术研究计划项目，2020年
- [3] 大宗粮油精深加工教育部重点实验室，2023年
- [4] 大宗粮油精深加工教育部重点实验室，2019年
- [5] 企业横向，果蔬挂面品质改进研究，2023年

发表的代表性论文(第一或通讯作者)

2019 年

- (1) **Fu Y.**, Yang Y., Chen S., Ning N., Hu H. Arabidopsis IAR4 modulates primary root growth under salt stress through ros-mediated modulation of auxin distribution. **Frontiers in Plant Science**, 2019, 10:522.

2020 年

- (1) Liu Y., Zhang X., Ding B., Ding W., Xiao S., Song J., Lyu Q., Ke Y., Wang X.*, **Fu Y.***. Effect of hydrocolloids on physical, thermal and microstructure properties of par-baked baguette during frozen storage. **International Journal of Biological Macromolecules**, 2020, 163C, 1866-1874.

2021 年

- (1) Yang H.[†], **Fu Y.[†]**, Zhang Y., Zhou J., Wang D., Gao Z., Ke Y., Lv Q., Ding B., Wang X. Evaluation of mannitol and xylitol on the quality of wheat flour and extruded flour products. **International Journal of Food Science & Technology**, 2021.
- (2) **Fu Y.***, Liu X., Xie Q., Chen L., Chang C., Wu W., Xiao S., Wang X.* Effects of Laminaria japonica polysaccharides on the texture, retrogradation, and structure performances in frozen dough bread. **LWT - Food Science and Technology**, 2021, 151, 112239

2022 年

- (1) Jia Z., Luo Y., Barba F., Wu Y., Ding W., Xiao S., Lyu Q., Wang X.*, **Fu Y.***. Effect of β -cyclodextrins on the physical properties and anti-staling mechanisms of corn starch gels during storage. **Carbohydrate Polymers**, 2022, 284, 119187
- (2) Liu Y., Leng Y., Xiao S., Zhang Y., Ding W., Ding B., Wu Y., Wang X.*, **Fu Y.***. Effect of inulin with different degrees of polymerization on dough rheology, gelatinization, texture and protein composition properties of extruded flour products. **LWT - Food Science and Technology**, 2022, 159, 113225
- (3) Zhang M., Xiao S., Gong A., Liu X., Wu Y., Du J., Ding W., **Fu Y.***, Wang X.* Effect of lactosucrose on the evaluation of visual appearance, texture, water mobility, microstructure, and inhibition of staling in wheat bread. **International Journal of Food Science & Technology**, 2022, 57(6), 3862-3871

- (4) Xie Q., Liu X., Xiao S., Pan W., Wu Y., Ding W., Lyu Q., Wang X. *, **Fu Y. *** Effect of Mulberry leaf polysaccharides on the baking and staling properties of frozen dough bread. **Journal of the Science of Food and Agriculture**, 2022, 102(13), 6071-6079
- (5) Zhou J., Jia Z., Wang M., Wang Q., Barba Francisco J., Wan L., Wang X.*, **Fu Y.***. Effects of Laminaria japonica polysaccharides on gelatinization properties and long-term retrogradation of wheat starch. **Food Hydrocolloids**, 2022, 133, 107908

2023 年

- (1) Liu Y., Liu X., Wan L., Xu P., Deng X., Ding B., Wang X. *, **Fu Y. ***. Study on the quality characteristics of hot-dry noodles by microbial polysaccharides. **Food Research International**, 2023, 163, 112200
- (2) Xie Q., Liu X., Liu H., Zhang Y., Xiao S., Ding W., Lyu Q., **Fu Y. ***, Wang X. *. Insight into the effect of garlic peptides on the physicochemical and anti-staling properties of wheat starch. **International Journal of Biological Macromolecules**, 2023, 229, 363-371
- (3) Liu H., Wan L., Xiao S., **Fu Y. ***, Wang X. *. Changes in the physicochemical and protein distribution properties of dough with the wheat oligopeptide incorporation. **Food Bioscience**, 2023, 52, 102354
- (4) Zhao K., Jia Z., Hou L., Yang H., Xiao S., Ding W., Zhang Y., Wang X.*, **Fu Y.***, Wu Y.*. Interpretation of the effects of hydroxypropyl starch and hydroxypropyl distarch phosphate on frozen raw noodles quality during frozen storage: Studies on water state and starch-gluten network properties. **International Journal of Biological Macromolecules**, 2023, 242, 124783
- (5) Wan L., Wang X., Liu H., Xiao S., Ding W., Pan X., **Fu Y.***. Retrogradation inhibition of wheat starch with wheat oligopeptides. **Food Chemistry**, 2023, 427, 136723
- (6) **Fu Y.***, Zhou J., Liu D., Castagnini J., Barba Francisco J., Yan Y., Liu X.*. Wang X.*. Effect of mulberry leaf polysaccharides on the physicochemical, rheological, microstructure properties and in vitro starch digestibility of wheat starch during the freeze-thaw cycles. **Food Hydrocolloids**, 2023, 144(2):109057

- (7) Liu X., Xie Q., Liu D., Zhang Y., Xiao S., Ding W., **Fu Y.***, Wang X.*. Effects of garlic peptides on rheology, moisture, microstructure, gluten distribution, and baking properties of dough. **Journal of Cereal Science**, 2023, 103758
- (8) Liu X., Chen L., Chen L., Liu D., Liu H., Jiang D., **Fu Y.***, Wang X.*. The Effect of Terminal Freezing and Thawing on the Quality of Frozen Dough: From the View of Water, Starch, and Protein Properties. **Foods**, 2023, 12(21), 3888
- (9) Liu H., Xing Y., Liu D., Yang Q., Xiao S., Ding W., **Fu Y.***, Wang X.*. Quality deterioration of frozen dough bread during terminal freezing and thawing: From the insight of moisture and starch properties. **Food Bioscience**, 2023, 103435

授权的发明专利(第一发明人)

一种低丙烯酰胺含量冷冻甜面包及其制备方法, **ZL 201911001280.7**, 2021.9.24.

学术及社会兼职

- [1] 担任 Food Hydrocolloids, LWT - Food Science and Technology, Foods, Sustainability 等杂志审稿专家

学术讲座和报告

- [1] 付阳, 2021 年度世界著名科学家来鄂讲学论坛暨食品安全与健康国家研讨会, 2021 年 9 月 25 日, 武汉(分会报告)
- [2] 付阳, 2023 年粮食安全与食品科技创新国际论坛, 2023 年 10 月 21 日, 武汉(分会报告)