



武汉轻工大学

WUHAN POLYTECHNIC UNIVERSITY

食品科学与工程学院

SCHOOL OF FOOD SCIENCE AND ENGINEERING



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粮油储检与流通技术系

职称/职务

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讲授课程

《食品添加剂》

个人简介

博士、讲师。主要从事农产品品质及安全无损检测技术研究，主持大宗粮食精深加工教育部重点实验室（武汉轻工大学）开放课题、武汉轻工大学校立科研项目等纵向科研项目 2 项，获评 2021 武汉英才“优秀青年人才”。

教育经历

2016.09-2021.06: 浙江大学，农业工程专业，博士研究生

2019.10-2020.10: 美国劳伦斯伯克利国家实验室，博士联合培养

2012.09-2016.06: 南京农业大学，农业机械化及其自动化专业，本科

工作经历

2021.07-至今: 武汉轻工大学食品科学与工程学院

研究方向

- [1] 数字农业信息感知技术
- [2] 农产品品质及安全无损检测技术
- [3] 功能性纳米材料传感技术

主持的代表性科研项目

- [1] 大宗粮食精深加工教育部重点实验室（武汉轻工大学）开放课题：基于光谱及图像信息的水稻土壤重金属污染植物修复效果及规律研究
- [2] 武汉轻工大学校立科研项目：基于光谱融合的谷物黄曲霉素检测方法研究

发表的代表性论文(第一或通讯作者)

- [1] Xiaodan Liu, Xuping Feng, Yong He, et al. Rapid Discrimination of the Categories of the Biomass Pellets Using Laser-Induced Breakdown Spectroscopy. *Renewable Energy*, 2019, 143(C), 176-182.
- [2] Xiaodan Liu, Xuping Feng, Fei Liu, et al. Rapid Identification of Genetically Modified Maize Using Laser-Induced Breakdown Spectroscopy. *Food and Bioprocess Technology*. 2019, 12(2), 347-357.
- [3] Xiaodan Liu, Fei Liu, Weihao Huang, et al. Quantitative Determination of Cd in Soil Using Laser-Induced Breakdown Spectroscopy in Air and Ar Conditions. *Molecules*. 2018, 23(10), 2492.
- [4] Xiaodan Liu, Xuping Feng, Yong He, et al. Rapid Determination of Wood and Rice Husk Pellets' Proximate Analysis and Heating Value. *Energies*, 2020, 13(14), 3741.
- [5] Xiaodan Liu, Xuping Feng, Fei Liu, et al. Identification of Hybrid Rice Strain Based on Near-Infrared Hyperspectral Imaging Technology. *Transactions of the Chinese Society of Agricultural Engineering (Transactions of the CSAE)*. 2017, 33(22), 189-194. (in Chinese with English abstract).
- [6] Xiaodan Liu, Yonghui Yu, Xiulin Bai, et al. Rapid Identification of Insecticide- and Herbicide-Tolerant Genetically Modified Maize Using Mid-Infrared Spectroscopy. *Processes*, 2022, 11(1), 90.
- [7] Yong He, Xiaodan Liu, Yangyang Lv, et al. Quantitative Analysis of Nutrient Elements in Soil Using Single and Double-Pulse Laser-Induced Breakdown Spectroscopy. *Sensors*. 2018, 18(5), 1526.
- [8] Xiaofeng X, Xiaodan Liu, Tingna Mei, et al. Estimation of contamination level in microplastic-exposed crayfish by laser confocal micro-Raman imaging. *Food Chemistry*, 2022, 397, 133844.
- [9] Shuo Duan, Xuyue Wu, Xiaodan Liu, et al. Curcumin-enhanced MOF electrochemical sensor for sensitive detection of methyl parathion in vegetables and fruits. *Microchemical Journal*, 2023, 184: 108182.