

北大中文核心期刊  
中国科技核心期刊  
中国农林核心期刊

CN 11-5956/TS  
ISSN 2095-0381  
CODEN: BAZJAC

# 食品安全质量检测学报

## JOURNAL OF FOOD SAFETY & QUALITY

本期专题：

- 乳制品研究 ▪
- 食品风味化学与感官评价 ▪
- 动物性食品质量与安全 ▪

2022年8月  
半月刊  
第13卷 第15期



EBSCO收录  
英国《食品科学技术文摘》(FSTA)收录  
俄罗斯《文摘杂志》(AJ)收录  
英国国际农业与生物科学研究中心(CABI)全文收录  
《中国学术期刊网络出版总库》(CNKI)全文收录  
"万方数据 数字化期刊群"全文收录

ISSN 2095-0381



食品安全质量检测学报

第十三卷

第十五期

(4759-5096)

二〇二二年八月

# 食品安全质量检测学报

2022年8月 第13卷 第15期 半月刊

## 目次

### 本期专题：乳制品研究

- 母乳化结构脂制备研究进展 .....刘汝慧, 孙博涵, 陈玉洁, 等 4759-4765
- 聚合酶链式反应技术快速检测原料乳中荧光假单胞菌 .....步雨珊, 乔文君, 黄冬成, 等 4766-4772
- 干酪乳杆菌 SB27 降低 N-二甲基亚硝胺对大鼠肠黏膜细胞损伤作用研究  
.....王淑梅, 张莉丽, 张爽, 等 4773-4778
- 母乳、牛乳与主要小品种乳蛋白质组成及乳清蛋白二级结构比较.....张永金, 胡艳红, 葛武鹏, 等 4779-4786
- $\alpha$ -乳白蛋白对秀丽隐杆线虫寿命、繁殖力与活力的影响.....郜鑫洋, 樊振江, 张莉杰, 等 4787-4793

### 本期专题：食品风味化学与感官评价

- 大米中挥发性风味物质的研究进展 .....彭凯雄, 唐群勇, 郑钰涵, 等 4794-4801
- 香菇素与  $\beta$ -酪蛋白的相互作用研究 .....罗晓林, 徐献兵 4802-4809
- 基于风味特征的大米储藏过程脂肪酸值的预测研究.....陈通, 李海瑜, 张定宇, 等 4810-4815
- 基于气相色谱-离子迁移谱分析静宁烧鸡中的挥发性风味成分 .....师希雄, 田铸, 祁光增, 等 4816-4823
- 基于气相色谱-离子迁移谱分析红糖和赤砂糖挥发性风味成分差异 ...杨婷, 王智能, 杨柳, 等 4824-4831
- 基于气相色谱-离子迁移谱分析镇巴腊肉贮藏过程中挥发性风味成分变化  
.....朱联旭, 李崇勇, 孟怡璠, 等 4832-4839

### 本期专题：动物性食品质量与安全

- 畜禽肉及鸡蛋中多种兽药残留前处理技术研究进展 .....申佳璐, 王梁, 赵青余, 等 4840-4849
- 动物源性食品中甲基睾酮残留检测方法研究进展 .....尚晓睿, 史永富, 张璇, 等 4850-4857
- 树脂吸附结合近红外光谱同时检测小龙虾中铅、镉模型的建立 .....占可, 陈季旺, 徐言, 等 4858-4866
- 哈尔滨郊区池塘养殖鱼类六六六和滴滴涕残留特征及食用健康风险  
.....黄丽, 高磊, 郝其睿, 等 4867-4875
- 蜂蜜中蜜源植物成分的微流体芯片检测方法研究 .....季小荣, 徐文君, 李洁莉, 等 4876-4882
- 皮蛋壳表层红色斑块成分的分析与鉴定 .....孙静, 杨雪, 周彬, 等 4883-4890
- 日粮中添加不同油脂对鸡蛋工艺特性及质构指标的影响 .....郜周阳, 徐桂云, 杨静, 等 4891-4898

### 食品营养及功能性食品

- 无麸质食品品质提升研究现状 .....张帅, 韩冰, 任丽琨, 等 4899-4907
- 生姜现代药理学特性研究进展 .....谭玉梅, 江洪波, 高梦祥, 等 4908-4916
- 微波杀菌对果汁品质的影响 .....韩春然, 薛清卓, 遇世友, 等 4917-4923
- 硫酸软骨素的生物活性及其构效关系研究进展 .....蓝伟, 陈建平 4924-4932

仿刺参精、卵多肽体外抗氧化及对 H <sub>2</sub> O <sub>2</sub> 诱导巨噬细胞氧化损伤的保护作用 .....	王共明, 张 健, 李来好, 等	4933-4941
苹果渣多糖对链脲佐菌素诱导的糖尿病大鼠的降血糖和降血脂作用 .....	杜发强, 王小云, 王兆丰	4942-4948

## 食品分析与检测

物理场加工中细菌活的非可培养状态相关研究进展 .....	王国雄, 廖红梅	4949-4956
食品基质中微纳米塑料分离提取及质谱表征的研究进展 .....	刘诗文, 张慧艳, 齐诗哲, 等	4957-4965
基于二维材料的亲和型电化学传感器在食品安全分析中的应用 .....	胡源苓, 吴齐粤, 李永辉, 等	4966-4973
荧光适配传感器在食品中镰刀菌毒素检测的研究进展 .....	田 娇, 安 芳, 鹿 倩, 等	4974-4982
5-羟甲基糠醛在食品中的变化及其安全性研究进展 .....	朱秀清, 雷文华, 黄雨洋, 等	4983-4991
蛋白质组学技术在海产品品质评价中的应用及研究进展 .....	刘怡君, 赵 菲, 蒋 丹	4992-4999
基于特征性分子组成对不同海洋源肽粉的快速分类鉴别 .....	汪 琴, 王彦超, 常耀光, 等	5000-5007
贵州喀斯特高地地质背景区农产品 Cd、Cu、Zn、Se、F 含量特征及膳食暴露风险 .....	杨朝莲, 张清海, 卢勤辉, 等	5008-5016
基于径向常温通风仓囤的花生荚果干燥试验研究 .....	郭相毅, 王殿轩, 陈鹏泉, 等	5017-5025
近红外光谱分析技术快速检测藕粉品质 .....	王 燕, 付 琪, 李 颖, 等	5026-5034
赤霞珠葡萄感染霜霉病后的果实品质和挥发性成分变化研究 .....	李雪瑶, 孔志强, 赵浩然, 等	5035-5043
不同环境因子对扩展青霉和指状青霉生长和产酸的影响 .....	李有媛, 邹华英, 焦文晓, 等	5044-5052
藁头抗菌成分的复合酶法提取及其抑菌性能评估 .....	王 艳, 陈 谦, 徐 攀, 等	5053-5061
鄂西北稀土矿区粮食与蔬菜中重金属污染风险评价 .....	鲍丽萍, 陈 芸, 杨海博, 等	5062-5069
不同陈化时间老香黄的差异物质识别及变化研究 .....	蔡惠钿, 林良静, 陈 曦, 等	5070-5078
投稿须知 .....		5079-5080

## 学术评论与快讯

食品安全风险管控中的行政管理研究——评《食品安全与质量管理》 .....	卞 春, 季澜洋	5081
老年人营养不良风险评估及营养干预措施研究——评《老年人营养与膳食指导》 .....	车小雯	5082
高校体育教学与食品营养教育的融合——评《现代食品营养与安全》 .....	刘 斌, 李 玲	5083
基于高校食堂食物浪费的德育教育研究——评《高校食堂食物浪费报告》 .....	刘 洋	5084
食品企业安全管理中计算机信息技术的应用分析——评《食品企业管理》 .....	刘 健	5085
高校英语教学中中西饮食文化的比较研究——评《中西饮食文化比较》 .....	杨雨桐	5086
计算语言学视角下的食物与文化研究——评《食物语言学》 .....	李 珺	5087-5088
音乐艺术融入餐饮空间设计与体现——评《食客时代——餐饮品牌与空间设计》 .....	刘素芳	5089-5090
食品包装艺术设计对传统文化的传承——评《食品包装设计》 .....	刘 翔	5091-5092
以美食类节目为载体的中华饮食文化传播探索——评《中华饮食文化概论》 .....	吴倩倩	5093-5094
运动营养学在高校体育教学中的应用分析——评《运动营养学》 .....	余倩倩	5095-5096

# Journal of Food Safety and Quality

Aug., 2022 Vol. 13 No. 15 Semimonthly

## Contents

### Special Topic: Study of Dairy Products

- Research progress in the preparation of human milk fat substitutes..... LIU Ru-Hui, *et al* 4759-4765
- Rapid detection of *Pseudomonas fluorescens* in raw milk based on polymerase chain reaction assay  
..... BU Yu-Shan, *et al* 4766-4772
- Study on *Lactobacillus casei* SB27 reducing the damage of N-nltrosodimethylamine to intestinal  
mucosal cells in rats..... WANG Shu-Mei, *et al* 4773-4778
- Comparative study on the composition of protein and secondary structure of whey protein in human milk,  
milk and main small varieties of milk ..... ZHANG Yong-Jin, *et al* 4779-4786
- Effects of  $\alpha$ -lactalbumin on the lifespan, fecundity and vitality of *Caenorhabditis elegans*  
..... GAO Xin-Yang, *et al* 4787-4793

### Special Topic: Flavor Chemistry of Food and Sensory Evaluation

- Research progress of volatile flavor substances in rice ..... PENG Kai-Xiong, *et al* 4794-4801
- Study on the interaction between lentinin and  $\beta$ -casein ..... LUO Xiao-Lin, *et al* 4802-4809
- Prediction of fatty acid values during rice storage based on flavor characteristics ..... CHEN Tong, *et al* 4810-4815
- Analysis of volatile flavor compounds in Jingning braised chicken by gas chromatography-ion migration  
spectrometry ..... SHI Xi-Xiong, *et al* 4816-4823
- Analysis of the volatile flavor component differences in brown sugar and brown granulated sugar based  
on gas chromatography-ion mobility spectrometry..... YANG Ting, *et al* 4824-4831
- Analysis of the volatile flavor compound changes of Zhenba bacon during storage based on gas  
chromatography-ion mobility spectrometry ..... ZHU Lian-Xun, *et al* 4832-4839

### Special Topic: Quality and Safety of Animal Food

- Research progress on pretreatment technology of multiple veterinary drug residues in meat and eggs  
..... SHEN Jia-Lu, *et al* 4840-4849
- Research progress on the detection methods of methyltestosterone residues in animal-derived foods  
..... SHANG Xiao-Rui, *et al* 4850-4857
- Establishment of a model for simultaneous determination of lead and cadmium in *Procambarus clarkii* by  
resin adsorption combined with near infrared spectroscopy ..... ZHAN Ke, *et al* 4858-4866
- Residues characteristics and edible health risks of hexachlorocyclohexane and dichlorodiphenyltrichloroethane  
in pond cultured fish in the suburbs of Harbin ..... HUANG Li, *et al* 4867-4875
- Study on microfluidic chip detection method of honey plant species in honey ..... JI Xiao-Rong, *et al* 4876-4882
- Analysis and identification of red patch components on preserved egg shell surface..... SUN Jing, *et al* 4883-4890
- Effects of adding different kinds of oils to the diet on the technological characteristics and texture  
indexes of eggs ..... GAO Zhou-Yang, *et al* 4891-4898

## Food Nutrition and Functional Food

- Research status of gluten free food quality improvement..... ZHANG Shuai, *et al* 4899-4907
- Research progress on modern pharmacological characteristics of *Zingiber officinale* Rose  
..... TAN Yu-Mei, *et al* 4908-4916
- Effects of microwave sterilization on fruit juice quality..... HAN Chun-Ran, *et al* 4917-4923
- Research progress on biological activity and structure-activity relationship of chondroitin sulfate  
..... LAN Wei, *et al* 4924-4932
- Antioxidative effects of *Apostichopus japonicus* sperm and egg polypeptide *in vitro* and their protective  
effects on H<sub>2</sub>O<sub>2</sub>-induced macrophage oxidative damage ..... WANG Gong-Ming, *et al* 4933-4941
- Hypoglycemic and hypolipidemic effects of polysaccharide from apple poman in streptozotocin induced  
diabetic rats ..... DU Fa-Qiang, *et al* 4942-4948

## Food Analysis and Detection

- Research progress on viable but non-culturable state of bacteria in physical field processing  
..... WANG Guo-Xiong, *et al* 4949-4956
- Research progress in micro/nanoplastics separation, extraction in food substrates and characterization by  
mass spectrometry ..... LIU Shi-Wen, *et al* 4957-4965
- Application of affinity electrochemical sensors based on two-dimensional materials in food safety analysis  
..... HU Yuan-Ling, *et al* 4966-4973
- Research progress on fusarium toxin detection in food using fluorescence aptamer sensors  
..... TIAN Jiao, *et al* 4974-4982
- Research progress in changes of 5-hydroxymethylfurfural in food and its safety ..... ZHU Xiu-Qing, *et al* 4983-4991
- Application and research progress of proteomics technology in seafood quality evaluation  
..... LIU Yi-Jun, *et al* 4992-4999
- Rapid classification and identification of different marine-derived peptide powders based on characteristic  
molecular composition ..... WANG Qin, *et al* 5000-5007
- Characteristics and dietary exposure risk of Cd, Cu, Zn, Se and F content in agricultural products from  
karst high geological background areas in Guizhou Province ..... YANG Chao-Lian, *et al* 5008-5016
- Experimental study on the drying of peanut pods based on radial ambient ventilated warehouse hoard  
..... GUO Xiang-Yi, *et al* 5017-5025
- Rapid detection of lotus root starch quality based on near infrared spectroscopy ..... WANG Yan, *et al* 5026-5034
- Study on changes of berry quality and volatile components of Cabernet Sauvignon grapes infected with  
downy mildew ..... LI Xue-Yao, *et al* 5035-5043
- Effects of different environmental factors on the growth and acid production of *Penicillium expansum* and  
*Penicillium digitatum* ..... LI You-Yuan, *et al* 5044-5052
- Extraction of antibacterial components from *Allium chinense* by compound enzymatic hydrolysis and  
evaluation of its antibacterial activity ..... WANG Yan, *et al* 5053-5061
- Risk assessment of heavy metal pollution in grains and vegetables in rare earth mining areas in Northwestern  
Hubei..... BAO Li-Ping, *et al* 5062-5069
- Study on identification and change of different substances in Laoxianghuang at different aging time  
..... CAI Hui-Tian, *et al* 5070-5078
- Instruction to authors ..... 5079-5080