

03
2020

F&M 食品与机械

FOOD & MACHINERY

第36卷 总第
221期

食品与机械编辑部

F&M 中国食品科学技术学会会刊

食品与机械

1985年创刊

03
2020
总221期

中文核心期刊

科技核心期刊

RCCSE核心期刊



作者 / 高鹏

目 次

CONTENTS

基础研究 FUNDAMENTAL RESEARCH

- 001 碱诱导鸭蛋蛋清凝胶特性的变化规律 凌子庭等
Changes of gel properties during heating of duck albumen induced by alkali LING Zi-ting et al
- 007 单糖对莲子淀粉回生特性的影响 陈悦宇等
Effect of monosaccharide on the retrogradation of lotus seed starch CHEN Yue-yu et al
- 014 清香型白酒酒醅乳酸菌分离鉴定及其自溶特性研究 李智琪等
Isolation and identification of lactic acid bacteria from fermented grain for light-Baijiu brewing and study of their autolysis characteristic LI Zhi-qi et al
- 019 控糖蛋糕对糖尿病患者血糖波动影响的临床试验 生庆海等
Clinical trial of sugar-control ling cakes on blood glucose fluctuation in diabetic patients SHENG Qing-hai et al
- 024 小黑药亲电成分干预混合游离脂肪酸诱导的人肝癌细胞株HepG2脂肪变性研究 董文乐等
Study on intervention effects of electrophilic components from *Xiaoheiyeao* against free fatty acid-induced steatosis in HepG2 cells DONG Wen-le et al
- 034 3种藜麦发芽过程中生物活性物质及其抗氧化活性的变化规律 陈益胜等
Changes of bioactive substances and antioxidant properties of three kinds of quinoa during germination CHEN Yi-sheng et al
- 039 红松松仁膜衣膳食纤维的功能性质 王超等
Study on functional properties of dietary fiber from *Pinus Koraiensis* nut coated-film WANG Chao et al
- 043 基于HS-SPME/GC/MS的姜花不同部位挥发性成分分析 赵杨等
Analysis on volatile components in different parts of *Hedychium coroarium* by HS-SPME/GC/MS ZHAO Yang et al
- 048 基于主成分分析法的贵州芸豆品质评价 王何柱等
Quality evaluation of Guizhou kidney beans based on principal component analysis WANG He-zhu et al
- 054 蒙脱石三元膨胀阻燃薄片的制备及燃烧热解性能研究 李东亮等
Study of the preparation and thermal degradation and combustion behavior of flame-retardant montmorillonite ternary coating on reconstituted tobacco sheet LI Dong-liang et al

安全与检测 SAFETY & INSPECTION

- 060 高效液相色谱法快速检测小麦中交链孢酚单甲醚 徐群英等
Rapid detection of Alternaria monomethyl ether in wheat by high performance liquid chromatography XU Qun-ying et al
- 063 基于荧光分子开关和核酸适配体的镉离子快速检测方法 涂东堃等
Rapid detection of cadmium based on fluorescence molecular switch and aptamer TU Dong-kun et al
- 069 大体积进样气相色谱串联质谱法测定饮用水中29种半挥发性有机物 陈红波等
Determination of semi-volatile organic compounds in drinking water by gas chromatography-triple quad MS with large-volume injection CHEN Hong-bo et al
- 075 磁固相萃取—热脱附—气相色谱—串联质谱检测水中7种多氯联苯 付善良等
Determination of 7 kinds of polychlorinated biphenyls in water by magnetic solid phase extraction/thermal desorption-gas chromatography-tandem mass spectrometry FU Shan-liang et al
- 080 食品消费惩罚性赔偿责任的完善维度 裴宝莉
The improvement strategies of punitive compensation liability for food consumption PEI Bao-li
- 084 卷烟挥发性香气成分测定及烟丝加香工艺优化 李达等
Determination of volatile aroma components in cigarettes and optimization of flavoring process of tobacco LI Da et al
- 091 “一带一路”下中国食品贸易争端解决的法律机制 王筝
Legal mechanism of Chinese food trade dispute settlement under “Belt and Road” WANG Zheng

机械与控制 MACHINE & CONTROL

- 097 膜蒸馏与溶液除湿集成型食品低能耗干燥装置研究 桂大李等
Low energy consumption drying device for food based on integration of membrane distillation and liquid desiccant dehumidification GUI Da-li et al
- 101 基于水射流的典型淡水鱼类去鳞技术研究 李仁杰等
Experimental study on descaling technology of typical freshwater fish based on water jet LI Ren-jie et al
- 105 新型碗状海蜇螺旋切割系统设计及仿真研究与验证 韩传龙等
Design and simulation research and verification of a new bowl-shaped jellyfish spiral cutting system HAN Chuan-long et al
- 109 双螺杆压缩机转子啮合线对其性能参数的影响 于嘉川等
Study on the influence of meshing line of rotors on its performance of twin screw compressor YU Jia-chuan et al
- 115 烹饪机器人搅拌机构设计及其多体动力学分析 黄良海等
Design and multi-body dynamics analysis of stirring mechanism of cooking robot HUANG Liang-hai et al
- 119 运动控制和自适应模糊控制在码垛机器人中的应用 刘光等
Application of motion control and adaptive fuzzy control in palletizing robot LIU Guang et al
- 124 新丰核桃的多因素压缩试验 刘奎等
Study on various factors compression test of Xinfeng walnut LIU Kui et al
- 129 卷烟机参数对细支烟卷制的影响 周凯敏等
Effects of the parameter variations of the cigarette-making machine on slim cigarette producing ZHOU Kai-min et al
- 133 改进YOLOv3算法的筷子毛刺缺陷检测方法 陈俊松等
Defect detection method of chopsticks based on improved YOLOv3 algorithm CHEN Jun-song et al

包装与设计 PACKAGING & DESIGN

- 139 改性聚丙烯薄膜防黏性能验证及包装应用 隋越等
Verification of anti-adhesive performance of modified polypropylene films and its packaging application SUI Yue et al
- 143 静电纺魔芋葡甘聚糖—纳米四氧化三铁复合膜的力学性能研究 谢建华等
Study on the mechanical properties of electro-spun fiber film of Konjac glucomannan/combined with nano-Fe₃O₄ XIE Jian-hua et al

贮运与保鲜 STORAGE TRANSPORTATION & PRESERVATION

- 148 ⁶⁰Co-γ射线和电子束辐照对红碎茶杀菌效果与品质的影响 张祺玲等
Effect of ⁶⁰Co-γ ray and electron beam irradiation on microbial property and qualities of black broken tea ZHANG Qi-ling et al
- 154 冷链条件下马鲛鱼优势腐败菌生长动力学研究及货架期预测 邢家溧等
Establishment and prediction of growth kinetics and shelf-life model of specific spoilage organisms in mackerel at cold chain conditions XING Jia-li et al
- 161 基于BP神经网络的烟叶醇化感官质量仿真模拟 邓羽翔等
Simulation of sensory quality of tobacco leaf alcoholization based on BP neural network DENG Yu-xiang et al

提取与活性 EXTRACTION & ACTIVITY

- 166 维生素B族复合TRP肽和SOD对焦虑性抑郁症C57BL/6小鼠行为学改善的影响 朱西平等
Effects of a formula containing Vitamin B on ameliorates anxious/depression-like behaviors in an C57BL/6 mice model ZHU Xi-ping et al

173	松毛菇多酚抗氧化及抑菌活性研究 Antioxidant and antibacterial activity of polyphenols from <i>Lyophyllum Cinoraseens</i> Konr & Maubl	李彦坡等 LI Yan-po et al
179	青冈栎果壳多酚超声波辅助提取工艺优化及体外抗氧化能力研究 Optimization on ultrasonic-assisted extraction of polyphenols from <i>Cyclobalanopsis glauca</i> shells by response surface methodology and study on its antioxidant activity <i>in vitro</i>	茹月蓉等 RU Yue-rong et al
185	余甘子叶总黄酮的超声波法提取工艺优化及其抗氧化能力研究 Optimization of ultrasonic-assisted extraction of total flavonoids from leaves of <i>phyllanthus emblica</i> and its antioxidant capacity	杜丽娟等 DU Li-juan et al
190	兰州百合鳞茎多糖超声波辅助提取工艺优化及稳定性研究 Research on ultrasonic-assisted extraction process and stability of polysaccharides from <i>Lilium davidii</i> var <i>bulb</i>	李刚刚等 LI Gang-gang et al

开发利用 DEVELOPMENT & APPLICATION

194	微波处理对黑米酒物理化学特性的影响 Impacts of microwave treatment on physicochemical properties of black rice wine	陈卓瑶等 CHEN Zhou-yao et al
200	低硬度调和牛油的制备及品质分析 Preparation and quality analysis of low-hardness beef tallow	刘佳敏等 LIU Jia-min et al
203	木聚糖—铁复合物的制备工艺优化及抗氧化活性研究 Optimization on preparation technology of xylan polysaccharides iron complex and its antioxidant activities	李霞等 LI Xia et al
209	中老年人马铃薯复合米粉的研制及消化性研究 Research on the development and digestibility of potato compound rice flour for the middle-aged and elderly	刘皖骄等 LIU Wan-jiao et al
216	特色酵子的发酵特性及对馒头品质的影响 Fermentation characteristics of local stater Jiaozi and its influence on the quality of steamed bread	王雯斐等 WANG Wen-fei et al
220	基于MARS的卷烟吸阻和通风预测模型 Study on prediction model for draw resistance and ventilation of cigarette based on multivariate adaptive regression splines	何孝强等 HE Xiao-qiang et al

研究进展 ADVANCES

225	基于纳米材料改良酶联免疫吸附法的研究进展 Research progress of improved enzyme-linked immunosorbent assay based on nanomaterials	张光胤等 ZHANG Guang-yin et al
232	蓄冷板式冷藏箱的节能优化研究进展 Research progress on energy saving optimization of cold storage plate refrigerator	许启军等 XU Qi-jun et al

信息窗 INFORMATION

006	欧盟修订聚山梨醇酯在碳酸饮料中的使用剂量
018	韩国民间组织提出强化饮用水的安全及食品标签管理
079	日本研究:多摄入膳食纤维可降低死亡风险
123	欧盟评估一种来自转基因荧光假单胞菌的 α -淀粉酶的安全性
128	俄罗斯拟研究开发食品中邻苯二甲酸酯和其他对内分泌系统有害的物质的检测方法
138	韩国发布《食品添加剂法典》部分修改单
165	制茶不再凭经验 红茶“发酵”可量化
224	欧盟评估一种甘油三酯脂肪酶的安全性



“素”造未来

VEGETABLE PROTEINS FUTURE

湖南富马科食品工程技术有限公司 www.fumach.com

公司地址：中国湖南省长沙市开福区沙坪街道1042号 / 邮政编码：410153 / 电话：0731-8667 7666 / 0731-8667 9767
销售热线：186 7483 9600 / 188 7478 7475 / 售后热线：188 7478 7475 / 电子邮箱：fumach@vip.163.com

食品与机械编辑部

地 址：湖南省长沙市天心区赤岭路45号
邮 编：410076
电 话：(0731)85125568 85125598
E-mail: foodmm@vip.sina.com
网 址：www.ifoodmm.com
邮发代号：42-83 定价：20.00元

ISSN 1003-5788



9 771003 578209