

食品与发酵科技

SHIPIN YU FAJIAO KEJI

食品与发酵科技

中国科技核心期刊
中国期刊综合评价数据库统计源期刊
美国《化学文摘》(CA)收录期刊

荣获中国首届《CAJ-CD》规范执行优秀奖
《中国核心期刊(遴选)数据库》收录
波兰《哥白尼索引》(IC)收录期刊

6
2022

第58卷·总第232期

广告

泸州老窖 1952
时代经典 致敬开创



二〇二二年第六期

第五十八卷·总第二三二期

食品与发酵科技

FOOD AND FERMENTATION SCIENCE & TECHNOLOGY

(双月刊)

第58卷 第6期(总第232期)

2022年12月25日出版

编委会主任：孙宝国（院士） 陈 坚（院士）

编委会执行主任：陈 功 刘 念

编委会委员：胡永松 金济良 李大和 罗云波
饶平凡 张和平 李洪军 张 良
赵东 沈毅 王卫 郜海燕
励建荣 罗惠波 何强 李 诚
陈祥贵 唐善虎 刘学波 雷红涛
朱克永 游敬刚 王 刚 陈宏毅
潘建军 张其圣 冯霞 陈 蓉

主 编：陈 功

副 主 编：沈才洪 陈宏毅（执行）

责任编辑：史 辉

校 对：余文华

英文编辑：张蓓蓓

主管单位：四川省经济和信息化厅

主办单位：四川省食品发酵工业研究设计院有限公司

协办单位：中国轻工业酿酒工程及应用重点实验室
酿酒生物技术及应用四川省重点实验室
泸州老窖股份有限公司

四川省绵阳市丰谷酒业有限责任公司

四川剑南春集团有限责任公司

编辑出版：《食品与发酵科技》编辑部

地 址：中国·四川·成都市温江区杨柳东路中段98号
(四川省食品发酵工业研究设计院有限公司内)

邮 编：611130

电 话：028-82763572

传 真：028-82763572

投稿平台网址：<http://sksf.cbpt.cnki.net>

E-mail：sfaf 8889@163.com, sfaf 789@sina.com

网 址：www.SC-FFM.com

广告发布登记：5100004000309

印 刷：四川煤田地质制图印刷厂

发行范围：国内外公开发行

邮发代号：62-247

发 行：成都市邮政局

中国标准连续出版物号：ISSN 1674-506X
CN 51-1713/TS

定价：22.00元/册

版权声明

本刊已许可中国学术期刊(光盘版)电子杂志社在中国知网及其系列数据库产品中以数字化方式复制、汇编、发行、信息网络传播本刊全文。该社著作权使用费与本刊稿酬一并支付(已换算为杂志赠阅)。作者向本刊提交文章发表的行为即视为同意我刊上述声明。

C 目次 CONTENTS

(1973年创刊)

应用研究

- 外源喷施茉莉酸甲酯类对‘黑比诺’葡萄及葡萄酒香气品质的影响 高阳, 冷楠, 孔祥锦, 等(1)
枯草芽孢杆菌*lspA*影响细菌型豆豉中四甲基吡嗪的合成研究 陶怡, 黄晓润, 佟硕秋, 等(9)
用于包覆活性肽的脂质体的制备及稳定性评价 彭诗雨, 宋洪东, 管晓(16)
河西走廊产区本土酒酒球菌高密度培养工艺条件优化 于静, 毛亚玲, 李俊娥, 等(23)
影响螺旋藻螺距及其生长的关键因素研究 曹婕, 王智慧, 段蕊, 等(32)
贵州锦屏腌鱼细菌群落结构多样性分析及乳酸菌筛选 刘廷菊, 王义强, 戴奕杰, 等(39)
硫酸锌腌制对皮蛋凝胶特性的影响研究 何春霞, 王修俊, 沈畅萱, 等(47)
酱香型第五轮次酒中挥发性物质的分析与研究 李凤兰, 付平, 邓代霞, 等(53)
超声波-酶解法提取雷波莼菜多糖及抗氧化性研究 罗霜霜, 刘建, 周泽林(60)
不同烘烤方式对原切牛肉脯品质相关特性的影响 高山, 黄静, 罗丹, 等(66)
响应面法优化红曲菌液态发酵产莫纳可林K工艺 聂增宇, 胡文林, 尚学平, 等(72)
基于模糊数学法优化川菜用番茄酱料配方及其风味分析 唐人杰, 张瑞, 黄静, 等(77)
鸡骨丁调味酱加工工艺研究 李昊洋, 杨雨馨, 侯大军(83)
即食原切牛肉片贮藏过程中的品质变化及其货架期预测 黄静, 唐人杰, 罗丹, 等(89)
露酒老熟过程中风味与理化变化规律研究 万永, 刘青青, 刘小刚, 等(95)
营养条件对窖泥功能菌液微生物群落结构及产酸影响研究 王西, 张亚东, 李觅, 等(101)

综 述

- 香辛料精油对病原微生物抗菌机理的研究进展 王画, 朱秋劲, 陈超, 等(105)
火腿及灌肠类制品的功能活性研究与应用 郑荣美, 胡萍, 王晓宇, 等(115)

分析与检测

- 直接稀释进样—电感耦合等离子体质谱法测定味精成品中11种金属元素 柯坚灿, 罗科丽, 陈智伟, 等(121)
超高效液相色谱—串联质谱法测定动物源性食品中利巴韦林 刘秀娟, 曹秀, 余明霞, 等(127)
液相色谱法测定食用植物油中的呕吐毒素含量 程春梅(132)
HPLC-PDA 快速测定食用植物油中三种抗氧化剂 沈昌莹, 莫淑梅, 苏骏敏(135)

专业教学与实践

- “新农科”背景下翻转课堂教学模式在《果品蔬菜工艺学》课程中的探索实践 王腾飞, 霍梅俊, 杨佳丽, 等(141)
职业本科新形态活页式教材的建设与应用 朱菲, 陈祖满, 周静峰(145)

期刊基本参数:CN 51-1713/TS*1973*q*16*144*zh*22.00*5000*24*2022-12

FOOD AND FERMENTATION SCIENCE & TECHNOLOGY

(Bimonthly)

First Issue August 1973
Volume 58 Number 6(Total Number232) December 25,2022

Director of Editorial Board: SUN Baoguo	CHEN Jian
Executor Director of Editorial Board: CHEN Gong	LIU Nian
Member of Editorial Board: HU Yongsong	JIN Jiliang
LI Dahe	LUO Yunbo
RAO Pingfan	ZHANG Heping
LI Hongjun	ZHANG Liang
ZHAO Dong	SHEN Yi
WANG Wei	GAO Haiyan
LI Jianrong	LUO Huibo
HE Qiang	LI Cheng
CHEN Xianggui	TANG Shanhu
LIU Xuebo	LEI Hongtao
ZHU Keyong	YOU Jinggang
WANG Gang	CHEN Hongyi
PAN Jianjun	ZHANG Qisheng
FENG Xia	CHEN Rong

Chief Editor:CHEN Gong

Associate Editor:SHEN Caihong CHEN Hongyi(Executor)

Responsible Editor:SHI Hui

English Editor:ZHANG Beibei

Started in:1973

Been in Charge of By:Sichuan Provincial Economic and Information Department

Sponsored by:Sichuan Food and Fermentation Industry Research & Design Institute Co.,Ltd

Jointly Sponsored by:Key Laboratory of Brewing Engineering and Application of China National Light Industry Council
Liquor-making Biotechnology & Application Key Laboratory of Sichuan Province

Luzhou Laojiao Co.,Ltd.

Sichuan Mianyang Forgood Distillery Co., Ltd.

Sichuan Jiannanchun Group Co., Ltd.

Edited by:Editorial Department of Food and Fermentation Sciences & Techology

Address: 98# Medium Section, Liuhe Road Wenjiang District, Chengdu City, Sichuan, China

Postcode:611130

Tel:028-82763572

Fax:028-82763572

Contribution platform website:<http://sksf.cbpt.cnki.net>

E-mail:saf 8889@163.com,saf 789@sina.com

Http:www.SC-FFM.com

Printed by:Workshop of Sichuan Coalfield Geology Charting

Issue Scope:Issued Openly at Home and Aroad

Ordered at:Local Post Office or the Editorial Department

Chinese Standard Serial Number: ISSN 1674-506X
CN 51-1713/TS

Fixed Price:RMB 22.00 Every Issue

CONTENTS

- Effect of Exogenous Application of Methyl Jasmonate and Methyl Dihydrojasmonate on the Aroma Compounds of Pinot Noir Grapes and Wine..... GAO Yang, YE Nan, KONG Xiangjin, et al. (1)
- Bacillus subtilis* BJ3-2 *IspA* Affects the Synthesis of Tetramethylpyrazine in Bacterial-type Douchi..... TAO Yi, HUANG Xiaorun, TONG Suoqiu, et al. (9)
- Preparation and Stability Evaluation of Liposomes for Encapsulation of Active Peptides PENG Shiyu, SONG Hongdong, GUAN Xiao (16)
- Optimization of High Density Culture Conditions of Native *Oenococcus oeni* in Hexi Corridor YU Jing, MAO Yaling, LI June, et al. (23)
- Study on the Key Factors Affecting the Pitch and Growth of *Spirulina* CAO Jie, WANG Zhihui, DUAN Rui, et al. (32)
- Analysis of Bacterial Community Diversity and Screening of Lactic Acid Bacteria in Jinping Kipper from Guizhou Province LIU Tingju, WANG Yiqiang, DAI Yijie, et al. (39)
- Study on the Effect of Zinc Sulfate Pickling on Gel Properties of Preserved Egg HE Chunxia, WANG Xiujun, SHEN Changxuan, et al. (47)
- Analysis and Study on Volatile Compounds in Jiangxiang Baijiu in the Fifth Round LI Fenglan, FU Ping, DENG Daixia, et al. (53)
- Study on Extraction of Leibo-*Brasenia schreberi* Polysaccharides by Ultrasonic-enzymatic Hydrolysis Method and its Antioxidant Activity LUO Shuangshuang, LIU Jian, ZHOU Zelin (60)
- Effects of Different Roasting Methods on Related Characteristics Quality of Original Cut Beef Breast GAO Shan, HUANG Jing, LUO Dan, et al. (66)
- Optimization of Monacolin K Production by Liquid Fermentation of *Monascus* Using Response Surface Methodology NIE Zengyu, HU Wenlin, SHANG Xueping, et al. (72)
- Optimization of Tomato Sauce Formula for Sichuan Cuisine and its Flavor Analysis Based on Fuzzy Mathematics TANG Renjie, ZHANG Rui, HUANG Jing, et al. (77)
- Study on Processing Technology of Chicken Bone Diced Sauce LI Haoyang, YANG Yuxin, HOU Dajun (83)
- Quality Change and Shelf-life Prediction of Instant Raw Cut Beef Slices During Storage HUANG Jing, TANG Renjie, LUO Dan, et al. (89)
- Study on the Change Law of Flavor and Physicochemical in Lijiu Aging Process WAN Yong, LIU Qingqing, LIU Xiaogang, et al. (95)
- Effects of Nutritional Conditions on Microbial Community Structure and Acid Production of Functional Bacterial Liquid from Pit Mud WANG Xi, ZHANG Yadong, LI Mi, et al. (101)
- Antibacterial Mechanisms of Spice Essential Oils against Pathogenic Bacteria: A review WANG Hua, ZHU Qiujin, CHEN Chao, et al. (105)
- Study and Application of Functional Activity of Ham and Sausage Products ZHENG Rongmei, HU Ping, WANG Xiaoyu, et al. (115)
- Determination of 11 Metal Elements in Monosodium Glutamate by Direct Dilution Inductively Coupled Plasma Mass Spectrometry KE Jiancan, LUO Keli, CHEN Zhiwei, et al. (121)
- Determination of Ribavirin in Animal Derived Food by Ultra High Performance Liquid Chromatography-Tandem Mass Spectrometry LIU Xiujuan, CAO Xiu, YU Mingxia, et al. (127)
- Determination of Vomitoxin in Edible Vegetable Oil by High Performance Liquid Chromatography CHENG Chunmei (132)
- Rapid Determination of Three Antioxidants in Edible Vegetable Oils by HPLC-PDA SHEN Changying, MO Shumei, SU Junmin (135)
- Exploration and Practice of Flipped Classroom Teaching Mode in the Course of "Fruit and Vegetable Technology"Based on "New Agricultural Science" WANG Tengfei, HUO Meijun, YANG Jiali, et al. (141)
- New Loose-leaf Style Teaching Material Construction and Application of Higher Vocational Undergraduate Education
—Taking Food Professional English as an Example ZHU Fei, CHEN Zuman, ZHOU Jingfeng (145)