

《中国科学引文数据库》(CSCD)来源期刊
中文核心期刊

RCCSE中国核心学术期刊
中国科技论文统计源期刊(中国科技核心期刊)

美国《化学文摘》收录期刊
中国知识资源总库,中国科技期刊精品数据库收录期刊

食品工业科技

Science and Technology of Food Industry

第37卷 半月刊

2016年4月1日

出版



ISSN 1002—0306
CN 11-1759/TS

2016 7

ISSN 1002-0306



研发。知识。专业诀窍。
It's What's Inside.

结合独特的行业知识、消费者洞察以及受市场驱动的科技，开启研发之门。

欲知更多信息，请访问：DuPont.com/ItsWhatsInside



DUPONT®

杜邦营养与健康

Welcome to the Global Collaboratory.™

© 2015杜邦公司版权所有。杜邦椭圆形标志、杜邦™、以及所有标注有TM或®的产品和品牌均为杜邦公司或其关联公司的商标或注册商标。

CONTENTS

食品工业科技 2016年第7期，总351期

前瞻 *Project*

专家导航 Guideline

- 14 陈君石：我对“垃圾食品”的看法
中国工程院院士、国家食品安全风险评估中心研究员/陈君石

热点追踪 Focus Tracing

- 16 “2016两会议食厅”在京成功举办
——业内专家共商食安大计
- 20 两会上的“食品之声”
- 21 《中国奶产品质量安全研究报告》首次发布
- 权威发布 Authoritative Release
- 22 国家食药监总局公布食品安全十大典型案例
- 精英视点 Elite point of view
- 26 试论我国食品安全治理的社会共治原则
- 30 互联网金融背景下我国食品行业融资模式创新研究

实战 *Application*

法律案例 Legal Cases

- 34 实现健康中国梦 营养立法须落地

互动 *Communication*

展会风景 Exhibition View

- 38 食品与医药发酵产业联展
——发酵产业发展终端精华 共襄盛举
- 39 德国BIOFACH & VIVANESS 2016观众创新高
- 40 2016春季中国冰淇淋冷食展刷新记录 首日观众过万

行业广角 Industry Wide-angle

- 42 中国保健品销售的春天来了
- 43 传统茶文化遇新生 民族企业诠释功能袋泡茶发展关键
——2016第三届中国功能袋泡茶产业研讨会在京召开
- 44 开启世界食品配料的创新之路

信息 *Information*

- 46 资讯动态 News & Trends

微康生物
WECARE-BIO



益生菌专家

微康生物 专注于益生菌及其衍生物的研究、开发、生产及应用，旨在为医药、食品、农业、生态环保等领域，提供特殊有益微生物的菌种（菌粉）、衍生物、配套配料等定制产品及ODM/OEM完整解决方案。

产品

益生菌菌粉 // 生物保护剂 // 乳酸菌发酵剂（直投式酸奶发酵剂、直投式饮料发酵剂）
浓缩乳酸菌饮料 // 超浓缩乳酸菌发酵原液 // 益生菌制剂（粉剂、颗粒剂、片剂、胶囊）
乳酸菌风味粉 // 益生菌衍生物（灭活型益生菌菌体）

民族窗 中国梦
National probiotics Chinese dream

了解更多，请致电

江苏微康生物科技有限公司
400-8515-553/0512-86856998
sales@wecare-bio.com
<http://www.wecare-bio.com>



微康微信平台



微康手机网站

目 次

2016年第7期, 总351期

研究与探讨

- 海洋骨胶原低聚肽钙的分离纯化及结构鉴定.....刘文颖等(49)
烷基化果胶的微波合成及其理化性质研究.....俸思洁等(52)
 γ -射线降解玉米粉中玉米赤霉烯酮的效果及降解动力学研究.....赵琳等(56)
湿热处理温度对多孔淀粉理化性质的影响.....刘庆庆等(61)
玉米胚芽蛋白凝胶特性的研究.....石丹等(67)
杜香多糖的单糖组分分析及其理化性质研究.....张乔会等(71)
荣昌猪不同生长阶段肌肉营养品质的变化规律.....布丽君等(75)
酸改性籽瓜皮对Cu²⁺与Pb²⁺的吸附性研究.....杨继涛等(80)
不同低水解度的大米蛋白溶解性与结构变化的关系.....崔沙沙等(86)
苹果片红外-热风联合干燥特性研究.....穆金屏等(92)
反相微乳法与碱法、酶法制备的茶蛋白功能性质比较研究.....文静等(97)

生物工程

- 天鹅蛋中主要致腐微生物的分离与鉴定.....智秀娟等(101)
酸性蛋白酶基因Asp在红曲霉中的同源表达及序列分析.....邱思佳等(105)
植物乳杆菌LB-17产 γ -氨基丁酸培养基优化.....尹然等(110)
双功能化无机介孔材料对猪胰蛋白酶催化性能的影响.....邹彬等(116)
传统锦州虾酱中产蛋白酶嗜盐菌的分离与鉴定.....吕欣然等(121)
乳酸杆菌的表面特性及其黏附能力的研究.....向鑫玲等(126)
鲜切苹果腐败霉菌的分离鉴定及致腐力的研究.....刘程惠等(131)
L.lactis KLDs4.0325产细菌素发酵培养基的响应面优化.....王娜娜等(137)
传统发酵牦牛酸乳中高产胞外多糖乳酸菌的筛选与鉴定.....陈孝勇等(143)
维科天然生物制剂对干酪乳杆菌生长影响的初探.....李丹等(148)
L-氨基酸氧化酶的诱导表达及生物催化合成5-氨基戊酸的研究.....马金莲等(153)
长双歧杆菌耐氧菌株选育及其高密度发酵条件的研究.....吕秀明等(159)

工艺技术

- 响应面法优化杨树花多糖超声提取工艺.....焉鑫等(164)
基于纳豆激酶活性的纳豆加工条件的优化研究.....刘野等(170)
响应面优化红米原花青素提取工艺.....罗舜菁等(176)
挂糊鳙鱼块油炸工艺优化及不同工艺对非挥发性呈味物质的影响.....姜万舟等(182)
大孔树脂纯化新疆圆柏总黄酮工艺.....李倩等(188)
挤压生产糙米重组米的研究.....林雅丽等(193)
超声-微波协同法水解玉米皮渣制备还原糖的工艺研究.....张莉莉等(199)
果胶酶提取黑果枸杞花青素的工艺优化.....李彩霞等(204)
两性聚丙烯酰胺澄清甘蔗汁的研究.....沈王庆等(210)
响应面优化超声波提取油松花粉多酚的工艺研究.....范三红等(215)
双水相法提取葡萄皮渣中花色苷.....黄瑜等(220)
高压二氧化碳保鲜双孢蘑菇的工艺优化.....李静等(226)
马铃薯主食化面条新产品的研究.....赵煜等(232)
杂粮蛹虫草菌丝共生体中虫草素的优化提取及测定.....常正姣等(237)

目 次

2016年第7期，总351期

- 桑黄菌丝体多糖的提取及抗氧化活性研究..... 李月英等(243)
响应面优化超声提取杨桃多酚的工艺研究..... 蒋边等(248)
真空气流细胞破壁技术对橄榄总黄酮提取的影响..... 刘谋泉等(252)
鸡蛋壳制备的谷氨酸螯合钙片剂配方及工艺研究..... 胡荣等(258)

包装与机械

- 不同结构聚丙烯活性包装膜中肉桂醛向脂肪类食品模拟物的释放..... 杨芳婧等(263)

食品安全

- 高糖食品中2-(4-甲氧基苯氧基)丙酸钠的风险评估..... 崔海萍等(268)

分析检测

- 阳极溶出伏安法同时测定高盐调味品中铅镉..... 彭静等(274)
环介导等温扩增技术快速检测肉及肉制品中的牛源性成分..... 洗钰茵等(278)
川渝地区特色红油火锅底料挥发性风味物质的比较及主成分分析..... 曾朝懿等(283)
高效液相色谱测定樱桃酚类物质..... 姜楠等(288)

贮运保鲜

- 高湿冰箱温湿度控制性能及蔬菜保鲜效果研究..... 王剑功等(293)
不同涂膜剂对雷州黑鸭蛋保鲜效果的研究..... 崔红艳等(300)
振动胁迫对蟠桃果实加速软化影响的研究..... 李玲等(305)
基于单纯形-重心设计优化气调包装冷鲜猪肉的气体比例..... 孔萍等(310)
不同包装方式对冷藏鲈鱼品质的影响..... 范凯等(316)
漂洗液中氯化镁浓度对鲢鱼鱼糜凝胶特性的影响..... 余永名等(322)

营养与保健

- 盐胁迫对苦荞麦芽菜产量及黄酮含量的影响..... 万燕等(328)
谷朊粉鲜味肽的呈味规律研究..... 王丽华等(333)
不同容器发酵水豆豉预防CCl₄诱导肝损伤的研究..... 冯霞等(338)
红托竹荪多糖抗衰老和降血糖作用研究..... 叶敏等(343)
有氧运动训练和姜黄素对Ⅱ型糖尿病大鼠肝糖原及糖代谢信号通路的影响..... 张丽莉等(346)
淫羊藿补骨脂复合胶囊毒理学研究..... 尹利端等(350)
不同分子量的羧甲基壳聚糖对糖尿病小鼠血糖的影响..... 房晓琳等(355)
梓葛冻干粉针对脑微血管内皮细胞缺氧/复氧损伤的保护作用..... 尚远宏等(358)

专题综述

- 转基因线虫在阿尔茨海默症研究中的应用..... 李梵等(361)
加工方式对全谷物抗氧化活性影响研究进展..... 戴涛涛等(368)
近红外光谱技术在液态食品掺假检测中的应用..... 王君等(374)
基于碱基错配的核酸分子逻辑运算研究进展..... 程楠等(381)
固体酸降解木质纤维素的研究进展..... 刘超英等(387)
保健食品——泽兰的研究进展..... 刘娜等(392)
圣女果保鲜技术研究进展..... 田华等(396)

CONTENTS April, 2016(No.351)

Research and Investigation

Separation, purification and structural identification of calcium-chelating Marine bone collagen oligopeptides.....	LIU Wen-ying et al(49)
Microwave-assisted alkylation of pectin and its properties.....	FENG Si-jie et al(52)
Study on the efficiency and kinetics of γ -ray irradiation degradation of zearalenone in corn.....	ZHAO Lin et al(56)
Effect of heat-moisture treatment temperature on physicochemical properties of porous starch.....	LIU Qing-qing et al(61)
Study on gelation characteristics of corn germ proteins.....	SHI Dan et al(67)
Characterization of the monosaccharide composition and physical and chemical properties of <i>Ledum</i> polysaccharides.....	ZHANG Qiao-hui et al(71)
Nutritional quality variation of Rongchang pigs at different growth period.....	BU Li-jun et al(75)
Study on adsorption of Cu^{2+} and Pb^{2+} by acid modified seedy melon peel.....	YANG Ji-tao et al(80)
Relationship between solubility and structural properties of different low degree of hydrolysis of rice protein.....	CUI Sha-sha et al(86)
Drying characteristics of infrared radiation combining hot air for apple slices.....	MU Jin-ping et al(92)
Comparison of functional properties of tea protein in reverse micelles, alkali and enzymatic.....	WEN Jing et al(97)

Bioengineering

Isolation and identification of spoilage microorganisms from the swan eggs.....	ZHI Xiu-juan et al(101)
Homologous expression and sequence analysis of <i>Monascus Asp</i> gene.....	QIU Si-jia et al(105)
Optimization of fermentation conditions for the production of γ -aminobutyric acid by <i>Lactobacillus plantarum</i>	YIN Ran et al(110)
Effect of bifunctional mesoporous material on Porcine trypsin catalytic properties.....	ZOU Bin et al(116)
Isolation and identification of protease-producing halophilic bacteria in traditional Jinzhou shrimp paste.....	LV Xin-ran et al(121)
Surface properties and adhesion ability of <i>Lactobacillus</i>	XIANG Xin-ling et al(126)
Isolation and identification of spoilage molds from fresh-cut apple and their rot abilities.....	LIU Cheng-hui et al(131)
Optimization of fermentation medium for bacteriocin production of <i>L.lactis</i> KLDS4.0325 by response surface methodology.....	WANG Na-na et al(137)
Screening and identification of lactic acid bacteria strains with high exopolysaccharide-producing from traditional fermented Yak Yogurt.....	CHEN Xiao-yong et al(143)
Effect of WIC natural biologics on the growth of <i>Lactobacillus casei</i>	LI Dan et al(148)
Studies on the induction expression of <i>L</i> -amino acid oxidase and its biocatalytic application on the 5-aminovaleric acid.....	MA Jin-lian et al(153)
Breeding of oxygen-resistant <i>Bifidobacterium longum</i> and its high-density fermentation conditions.....	LV Xiu-ming et al(159)

Processing Technology

Optimization of ultrasound-assisted extraction (UAE) of polysaccharides from <i>Flos Populi</i> with response surface methodology.....	YAN Xin et al(164)
Optimization of natto processing conditions based on nattokinase activity.....	LIU Ye et al(170)
Optimization of extracting proanthocyanidins from red rice by response surface methodology.....	LUO Shun-jing et al(176)
Process optimization and analysis of non-volatile flavor compounds of deep-frying coated <i>Aristichthys nobilis</i>	JIANG Wan-zhou et al(182)
Purification of total flavonoids from <i>juniperus sabina</i> L. by macroporous resin.....	LI Qian et al(188)
Study on the preparation of reformed brown rice by extruding.....	LIN Ya-li et al(193)
Study on ultrasonic-microwave synergistic extraction of reducing sugar from corn bran by response surface method.....	ZHANG Li-li et al(199)
Optimization of extraction technology of anthocyanin from <i>Lycium ruthenicum</i> by pectinase.....	LI Cai-xia et al(204)
Study on sugar-cane juice clarified by the amphoteric polyacrylamide.....	SHEN Wang-qing et al(210)
Optimization of ultrasonic extraction of polyphenols from the pollen of <i>Pinus tabulaeformis</i> by response surface.....	FAN San-hong et al(215)
Extraction of anthocyanin from grape skin with aqueous two-phase system.....	HUANG Yu et al(220)
Optimization of high pressure carbon dioxide treatment on button mushroom (<i>Agaricus bisporus</i>) preservation.....	LI Jing et al(226)
Research of the new product of staple potato noodles.....	ZHAO Yu et al(232)
Optimizing extraction and determination of cordycepin in multigrain cordyceps militaris hyphae symbionts.....	CHANG Zheng-jiao et al(237)

CONTENTS April, 2016(No.351)

Extraction of polysaccharides from <i>Phellinus igniarius</i> mycelium and research of its antioxidation activity <i>in vitro</i>	LI Yue-ying et al(243)
Optimization of ultrasonic-assisted extraction of polyphenol from <i>Carambola</i> by response surface methodology.....	JIANG Bian et al(248)
Effect of vacuum air current technique for plant cell wall breakdown (VAPB) on the extraction of total flavonoids in chips of Chinese Olive (<i>Canarium album</i>).....LIU Mou-quan et al(252)
Optimization of formulation and preparation process for glutamate chelating calcium tablets.....	HU Rong et al(258)

Packaging and Machinery

Release of cinnamaldehyde from three types of polypropylene films to fatty food stimulant.....	YANG Fang-jing et al(263)
------------------------------------------------------------------------------------------------	---------------------------

Food Safety

Risk assessment for the sodium 2-(4-methoxy-phenoxy) propanoate in high sugar food.....	CUI Hai-ping et al(268)
-----------------------------------------------------------------------------------------	-------------------------

Analysis and Determination

Determination of lead and cadmium in high salt condiment via anodic stripping voltammetry.....	PENG Jing et al(274)
Development of loop-mediated isothermal amplification (LAMP) method for rapid detection of bovine in meat and meat products.....	XIAN Yu-yin et al(278)
Comparison of volatile flavor substances and principal components analysis of Sichuan and Chongqing region characteristic red oil hot pot.....ZENG Chao-yi et al(283)
Determination of polyphenols in cherry by high-performance liquid chromatography.....	JIANG Nan et al(288)

Storage and Preservation

Research of the humidity-control property of high-humidity refrigerator and effect on quality of fresh vegetables.....	WANG Jian-gong et al(293)
Effect of different coatings on the fresh-keeping in Leizhou black duck egg.....	CUI Hong-yan et al(300)
Effects of vibration conditions on softening of flat peach.....LI Ling et al(305)
Optimization of gas mixture ratio of modified atmosphere packaging for chilled meat by simplex-centroid design.....	KONG Ping et al(310)
Influence of packaging way on the quality of weever during cold storage.....	FAN Kai et al(316)
Effect of magnesium chloride concentration in washing water on the gel properties of silver carp surimi.....	YU Yong-ming et al(322)

Nutrition and Healthcare

Salt stress influence on yield of tartary buckwheat sprouts and flavonoids content.....	WAN Yan et al(328)
Taste regularity of umami peptides from gluten.....	WANG Li-hua et al(333)
Study on preventive effects of different vessels fermented Shuidouchi on CCl ₄ induced hepatic damage.....	FENG Xia et al(338)
Effects of <i>Dictyophora rubrovalvata</i> polysaccharide on anti-aging and hypoglycemic in mice.....	YE Min et al(343)
Effects of aerobic exercise training and curcumin on hepatic glycogen and glucose metabolism signaling pathway of type II diabetic rats.....	ZHANG Li-li et al(346)
Toxicological study on compound capsule of epimedium and psoraleae.....YIN Li-duan et al(350)
Effect of different molecular weight of CM-chitosan on blood glucose in diabetic mice.....	LI Xiao-lin et al(355)
Protective effect of Zige lyophilized powder on brain microvascular endothelial cells after hypoxia-reoxygenation injury.....	SHANG Yuan-hong et al(358)

Reviews

Application of transgenic <i>Caenorhabditis elegans</i> in Alzheimer's disease.....	LI Fan et al(361)
Review on the effect of processing techniques on antioxidant activity of whole grains.....	DAI Tao-tao et al(368)
Research progress in the application of near-infrared spectroscopy on the adulteration detection of liquid food.....WANG Jun et al(374)
Research progress in molecular logic operation based on nucleic acid mismatches.....	CHENG Nan et al(381)
Research progress in degrading Lignocellulose by solid acid.....LIU Chao-ying et al(387)
Advance researches of health food— <i>Lycopus lucidus</i> Turcz.....LIU Na et al(392)
Study advances on preservation technologies of cherry tomatoes.....TIAN Hua et al(396)

国际名企信赖的 乳化剂供应商



分子蒸馏单甘酯 Distilled Monoglycerides

实力强大 美晨集团的“分子蒸馏技术”获得国家科技进步奖，1999年率先在国内生产分子蒸馏单甘酯，2005年建成年产2万吨以上的自动化生产线。

个性化服务 可根据用户的实际需求生产不同指标的乳化剂，已与多家大型跨国集团建立了长期合作关系。

其它乳化剂产品系列：

山梨醇酐单硬脂酸酯(司盘60) Sorbitan monostearate
单、双硬脂酸甘油酯 Mono-and diglyceride

丙二醇脂肪酸酯 Propylene glycol esters of fatty acids
聚甘油脂肪酸酯 Polyglycerol esters of fatty acids