



QK2017239

全国中文核心期刊

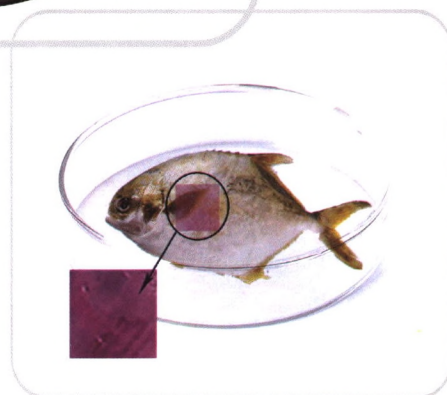
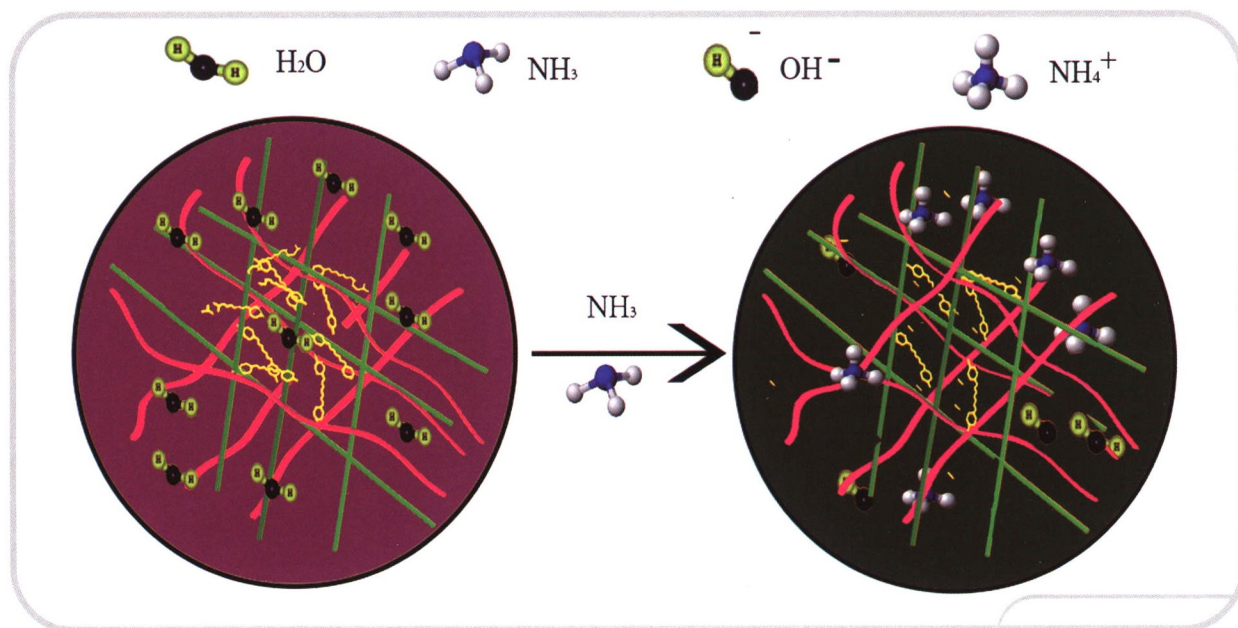
2020年2月 第41卷 第3期

主管单位：中国兵器装备集团有限公司

主办单位：中国兵器工业第五九研究所

包装工程

Packaging Engineering



封面文章：基于改性玫瑰茄花青素的新鲜度指示膜研制及其在鲳鱼包装中的应用

作者：江南大学 卢立新，贾代涛，潘嘹

包装工程

BAOZHUANG GONGCHENG

第41卷 第3期 2020年2月10日

目次

农产品贮藏加工

- 基于改性玫瑰茄花青素的新鲜度指示膜研制及其在鲳鱼包装中的应用
卢立新, 贾代涛, 潘嘹 1
- 间歇升温处理对苹果贮藏品质的影响
刘震远, 张洁, 贾晓昱, 杜美军, 李喜宏, 张鲜桃 7
- 复合生物保鲜剂对冷鲜牛肉的保鲜效果研究
董文丽, 巩雪, 常江 13
- 低温胁迫对青椒膜脂代谢的影响
马明杰, 程顺昌, 纪淑娟, 胡美斯, 阴晓晨, 贾文韬, 魏宝东 21
- 漂烫处理对老山芹速冻贮藏护色效果的影响
赵廉诚, 张娜, 邢竺静, 王如梦, 马娜, 李笑梅 28
- 外源NO联合壳聚糖/纳米TiO₂涂膜复合处理对枇杷保鲜效果的影响
曾丽萍, 孟金明, 樊爱萍, 寸艳丹, 宋桂兰, 王藤 36
- 超临界CO₂萃取番茄红素的工艺条件优化
陈俊杰, 马永强, 王鑫, 黎晨晨 42
- 基于紫外/可见光谱技术的李子硬度无损检测
尚静, 孟庆龙, 张艳 51
- 可释放SO₂保鲜包装袋在荔枝保鲜中的应用
魏华, 李小东 57

食品流通与包装

- 基于Fluent的多温区保温包装箱温度场仿真分析
方文康, 宋海燕, 吴迪 62
- 谎报行为下生鲜农产品供应链协调研究
贾鑫, 陈化飞 70
- 基于FAST模型的水果快递箱概念设计
董晓玮, 徐晓琴 77
- 碳点荧光探针在农产品快速检测中的应用进展
张天磊, 周奕华, 曹晟 82
- 阻隔技术在塑料饮料包装上的应用
徐雯, 印雄飞, 郭太松 92
- 抗菌涂层和抗菌塑料在食品包装中的研究发展
罗坤明, 吴志林 98

缓冲与隔振

- 奇偶层交错对瓦楞纸板缓冲性能的影响
孙德强, 郝静, 李靖靖, 安兴, 孙玉瑾 108
- 纸蜂窝夹芯复合板材静态缓冲性能研究
张衬英, 杨小俊, 叶竹君, 覃路韦, 张斌 115

新材料技术

聚多巴胺在结构显色领域的研究及应用进展

王淑珍, 田婕慧, 陈永利, 刘文霞 121

四种多元醇增塑剂对淀粉-壳聚糖复合膜的性能研究

王芳, 赵郁聪, 靳刘萍, 陈满儒, 丁勇, 李鸣 128

微胶囊红磷阻燃木塑复合材料的性能研究

魏占锋, 郭玉花, 原泽坤, 谢亚佐, 兰武锦, 冯琳, 马舒慧 133

MOF/聚合物复合膜基底的研究进展

张宁, 肖峰, 曹源清, 赵辉 138

偶联剂处理滑石粉填充聚乙烯薄膜的研究

郝冬冬, 丁永红, 闫秋羽 145

单糖对玉米淀粉基复合膜性能的影响

赵郁聪, 靳刘萍, 陈满儒, 倪妍, 李鸣, 丁勇 150

电器封装用高效导热/阻燃环氧复合材料的制备

宁廷州, 付玲, 张敬芝 156

工艺与装备

机电混驱弧面凸轮机构运动学数值法分析

曹巨江, 杨坤, 闫茹, 杨奔奔, 龚琰 164

基于分拣机器人零售电商订单动态聚类及仿真

王晨, 尹静, 王红春 170

新型四轴码垛机器人机构设计与动力学仿真分析

董海涛, 武文革 176

液压滑阀阀芯结构对流场的影响

智慧, 张健 182

基于2-PSR/UPU并联机构的旋盖装置设计及性能分析

王新宇, 李虹, 李亚丽, 马春生, 李瑞琴 188

基于ROS的冷链配送机器人设计

任工昌, 胡小龙, 刘朋, 吴梦珂 194

基于改进蚁群算法的码垛机器人路径规划应用研究

邓小飞, 张志刚 200

基于SolidWorks与ADAMS的工业机器人动力学仿真

贾磊, 朱彦齐 206

图文信息技术

基于NSST多尺度自适应的Retinex低照度图像增强算法

王晓红, 翟焱修, 麻祥才 211

基于模糊逻辑的纸病检测动态阈值设置方案研究

冯波, 汤伟, 曲蕴慧, 佟永亮 218

基于SVM的捆装圆棒材计数方法

刘昶, 张鑫, 朱立瑶 224

广告索引

封二 普拉斯包装材料有限公司

封三 中国兵器工业第五九研究所包装工程技术研究中心

插页

A1 国防科技工业自然环境试验研究中心

A2 装备环境工程杂志

期刊基本参数: CN 50-1094/TB*1980*s*A4*229*zh*P*¥ 45.00*5000*35*2020-02

PACKAGING ENGINEERING

(Initial Issue 1980) (Semimonthly) Vol.41 No.3(Total No.417) Feb.10, 2020

Contents

Storage and Processing of Agricultural Products

Development of Freshness Indicator Film Based on Modified Roselle Anthocyanin and Its Application in Catfish Packaging

LU Li-xin, JIA Dai-tao, PAN Liao 1

Storage Quality of Apple under Intermittent Warming Treatment

LIU Zhen-yuan, ZHANG Jie, JIA Xiao-yu, et al. 7

Quality Change of Chilled Beef under the Action of Compound Biological Preservative

DONG Wen-li, GONG Xue, CHANG Jiang 13

Effects of Low Temperature Stress on Membrane Lipid Metabolism of Capsicum Annuum

MA Ming-jie, CHENG Shun-chang, JI Shu-juan, et al. 21

Effect of Blanching Process on Color Protection of *Heracleum Moellendorffii* during Quick-freeze Storage

ZHAO Lian-cheng, ZHANG Na, XING Zhu-jing, et al. 28

Effects of Exogenous NO Combined with Chitosan/Nano-TiO₂ Coating on Preservation of Loquat Fruit

ZENG Li-ping, MENG Jin-ming, FAN Ai-ping, et al. 36

Optimization of Technological Conditions for the Extraction of Lycopene by Supercritical CO₂

CHEN Jun-jie, MA Yong-qiang, WANG Xin, et al. 42

Nondestructive Detection of Firmness of Plums Based on UV/VIS Spectroscopy

SHANG Jing, MENG Qing-long, ZHANG Yan 51

Application of Fresh-keeping Packaging Bags with Releasable SO₂ in Litchi Preservation

WEI Hua, LI Xiao-dong 57

Food Distribution and Packaging

Temperature Field Simulation of Multi-Temperature Zone Thermal Insulation Box Based on Fluent

FANG Wen-kang, SONG Hai-yan, WU Di 62

Supply Chain Coordination of Fresh Agricultural Products under the Behavior of Misreporting

JIA Xin, CHEN Hua-fei 70

Conceptual Design of Fruit Express Box Based on FAST Model

DONG Xiao-wei, XU Xiao-qin 77

Advances in Application of CDs Fluorescent Probe in Rapid Detection of Agriculture Products

ZHANG Tian-lei, ZHOU Yi-hua, CAO Sheng 82

Application of Barrier Technology in Plastic Beverage Packaging

XU Wen, YIN Xiong-fei, GUO Tai-song 92

Research and Development of Antimicrobial Coatings and Antimicrobial Plastics in Food Packaging

LUO Kun-ming, WU Zhi-lin 98

Cushioning and Vibration Isolation

Influences of Odd and Even Layer Interleaving on Cushioning Properties of Corrugated

Paper Fiberboard	<i>SUN De-qiang, HAO Jing, LI Jing-jing, et al.</i>	108
Static Cushioning Performance of Paper Honeycomb Sandwich Composite Boards	<i>ZHANG Chen-ying, YANG Xiao-jun, YE Zhu-jun, et al.</i>	115

Advanced Materials Technologies

Research and Application Progress of Polydopamine in the Field of Structural Color	<i>WANG Shu-zhen, TIAN Jie-hui, CHEN Yong-li, et al.</i>	121
Properties of Starch-Chitosan Composite Films by Four Polyols as Plasticizers	<i>WANG Fang, ZHAO Yu-cong, JIN Liu-ping, et al.</i>	128
Properties of Microencapsulated Red Phosphorus Flame Retardant Wood-plastic Composites	<i>WEI Zhan-feng, GUO Yu-hua, YUAN Ze-kun, et al.</i>	133
Research Progress of MOF/Polymer Composite Film Substrates	<i>ZHANG Ning, XIAO Feng, CAO Yuan-qing, et al.</i>	138
Polyethylene Film Filled with Talc Modified by Coupling Agent	<i>HAO Dong-dong, DING Yong-hong, YAN Qiu-yu</i>	145
Effect of Monosaccharide Plasticizer on Mechanical Properties of Corn Starch-based Composite Film	<i>ZHAO Yu-cong, JIN Liu-ping, CHEN Man-ru, et al.</i>	150
Preparation of Epoxy Composites with Highly Efficient Thermal Conductivity/Flame Retardancy for Electrical Packaging	<i>NING Ting-zhou, FU Ling, ZHANG Jing-zhi</i>	156

Process and Equipment

Numerical Analysis on Kinematics of Electromechanical Hybrid Drive of Globoidal Cam Mechanism	<i>CAO Ju-jiang, YANG Kun, YAN Ru, et al.</i>	164
Dynamic Clustering and Simulation of Retail E-commerce Order Based on Sorting Robot	<i>WANG Chen, YIN Jing, WANG Hong-chun</i>	170
Mechanism Design and Dynamics Simulation of a New Four-axis Palletizing Robot	<i>DONG Hai-tao, WU Wen-ge</i>	176
Effects of Hydraulic Spool Valve Core Structure on Fluid Field	<i>ZHI Hui, ZHANG Jian</i>	182
Design and Performance Analysis of a Novel Capping Device Based on 2-PSR/UPU Parallel Mechanism	<i>WANG Xin-yu, LI Hong, LI Ya-li, et al.</i>	188
Design of Medical Distribution Robot Based on Robot Operating System	<i>REN Gong-chang, HU Xiao-long, LIU Peng, et al.</i>	194
Path Planning and Application of Palletizing Robot Based on Improved Ant Colony Algorithm	<i>DENG Xiao-fei, ZHANG Zhi-gang</i>	200
Dynamic Simulation of Industrial Robot Based on SolidWorks and ADAMS	<i>JIA Lei, ZHU Yan-qi</i>	206

Graphic Information Technology

Retinex Low Light Image Enhancement Algorithm Based on Multi-Scale Adaptive NSST	<i>WANG Xiao-hong, ZHAI Yan-xiu, MA Xiang-cai</i>	211
Dynamic Threshold Setting Scheme of Paper Disease Detection Based on Fuzzy Logic	<i>FENG Bo, TANG Wei, QU Yun-hui, et al.</i>	218
Bundled Round Bars Counting Method Based on SVM	<i>LIU Chang, ZHANG Xin, ZHU Li-yao</i>	224

包装工程

Packaging Engineering

全国中文核心期刊

主管单位：中国兵器装备集团有限公司
主办单位：中国兵器工业第五九研究所

ISSN 1001-3563

CN 50-1094 / TB

定价：45.00元

邮发代号：78-30

国外发行号：BM1799

广告经营许可证：渝工商广字040297号

ISSN 1001-3563



9 771001 356205