



# 中国口岸科学技术

要加快科技体制机制改革，加大科技创新和成果转化力度。

ZHONGGUO KOUAN KEXUE JISHU



ISSN 2096-9201

中华人民共和国海关总署主管



2022

4

第4卷  
总第34期

# 目次

## 中国口岸科学技术

### ◎专论综述

#### 04 核辐射全息定位成像系统设计研究

..... 吕振雷 朱艺航 尚士进 江年铭 边勇 汪万春 万鹏 马天子

#### 12 基于双模纳米探针的化学生物传感技术研究进展

..... 焦艳娜 徐宙 崔凤云 尹雪花 唐会智 易征璇 钟昊 肖中宁

#### 20 化妆品非法添加物分析技术研究进展

..... 陆奕娜 段建发 陈建伟 林文 吕坚玲

### ◎商品检验

#### 26 粉体粒度检测用标准样品均匀性和稳定性研究

..... 许宏民 朱再胜 盖国胜

### ◎动植物检疫

#### 31 苹果牛眼果腐病菌*Neofabraea perennans*活性检测方法

..... 李娜 黄河清 章桂明

#### 38 赤材小蠹与四粒方胸小蠹的比较研究

..... 林伟 水克娟 黎财慧 李猷 蔡波 徐森锋

### ◎卫生检疫

#### 43 LAMP-微流控芯片技术在现场检测中的研究进展

..... 王欢 史梅梅 吴丰春 王昱 袁军 李彦宣 田江山 聂福平

#### 48 多种方法鉴定分析一次性使用口罩中金黄色葡萄球菌

..... 高沙尔·卡依尔哈力 巴哈提古丽·马那提拜 马雪艺 何媛 艾菲娜·赛力克

### ◎食品安全

#### 56 液相色谱法测定乳制品中乳酸链球菌素

..... 陈延伟 何龙凉 李小琴 杨怀军 谢毓群

#### 61 三文鱼鱼松中大西洋鲑鱼成分荧光定量PCR检测方法的建立

..... 屈菲 王秋艳 赵大千 洪滨 万超

### ◎分析化学

#### 67 近红外光谱法测定纺织品纤维含量实验室间比对结果及分析

..... 王琳譞 周建 刘超子 武鹏

#### 74 高效液相色谱-质谱联用法测定塑料包书皮中邻苯二甲酸酯类物质

..... 李蔚 吴楠 田冲 洪天宇 马腾洲 王康

#### 80 超高效液相色谱-串联质谱法同时测定保健食品中66种非法添加药物的含量

..... 林雨青 刘正才 郑子威 林志栋 王丹红

### ◎研究简报

#### 92 一种潜在入侵性害虫锈色小坚甲的鉴定

..... 郭蕾 林伟 徐森锋 刘若思

# CONTENTS

## CHINA PORT SCIENCE AND TECHNOLOGY

---

### ◎ Monographs and Reviews

- 04 Study on Design of Nuclear Radiation Holographic Locating and Imaging System  
..... LYU Zhen-Lei ZHU Yi-Hang SHANG Shi-Jin JIANG Nian-Ming  
..... BIAN Yong WANG Wan-Chun WAN Peng MA Tian-Yu
- 12 Research Progress of Chemical and Biological Sensing Based on Dual-mode Nanoprobes  
..... JIAO Yan-Na XU Zhou CUI Feng-Yun YIN Xue-Hua  
..... TANG Hui-Zhi YI Zheng-Xuan ZHONG Hao XIAO Zhong-Ning
- 20 Research Progress in Determination Technologies for Substances Illegally Added in Cosmetics  
..... LU Yi-Na DUAN Jian-Fa CHEN Jian-Wei LIN-Wen LYU Jian-Ling

### ◎ Commodity Inspection

- 26 A Study on Homogeneity and Stability of Standard Samples for Powder Size Testing  
..... XU Hong-Min ZHU Zai-Sheng GAI Guo-Sheng

### ◎ Animal and Plant Quarantine

- 31 Viability Test of Conidia Activity of *Neofabraea Perennans*  
..... LI Na HUANG He-Qing ZHANG Gui-Ming
- 38 Difference between *Xyleborus ferrugineus* (Fabricius) and *Euwallacea similis* (Ferrari) (Curculionidae: Scolytinae)  
..... LIN Wei SHUI Ke-Juan LI Cai-Hui LI You CAI Bo XU Miao-Feng

### ◎ Health Quarantine

- 43 Development of Loop-mediated Isothermal Amplification-based Microfluidic Chip Technology for Point-of-Care Test  
..... WANG Huan SHI Mei-Mei WU Feng-Chun WANG Yu YUAN Jun LI Yan-Xuan TIAN Jiang-Shan NIE Fu-Ping
- 48 Multiple Methods Used to Identify and Analyze *Staphylococcus Aureus* in Disposable Sanitary Product Masks  
..... Gaoshaer Kayierhali Bakhetsgul Manatbay MA Xue-Yi HE Yuan Aifina Selik

### ◎ Food Safety

- 56 Determination of Nisin in Dairy Products by Liquid Chromatography  
..... CHEN Yan-Wei HE Long-Liang LI Xiao-Qin YANG Huai-Jun XIE Yu-Qun
- 61 Establishment of a Fluorescent Quantitative PCR Method for Molecular Traceability of Atlantic Salmon Fish From Salmon Floss  
..... QU Fei WANG Qiu-Yan ZHAO Da-Qian HONG Bin WAN Chao

### ◎ Analytical Chemistry

- 67 Inter-laboratory-comparison Results and Analysis of Textiles Fiber Content Determination Using Near-infrared Spectroscopy  
..... WANG Lin-Xuan ZHOU Jian LIU Chao-Zi WU Peng
- 74 The Determination of Phthalate Esters in Book Covers by HPLC-MS  
..... LI Wei WU Nan TIAN Chong HONG Tian-Yu MA Teng-Zhou WANG Kang
- 80 Simultaneous Determination of 66 Illegally Added Drugs in Health Foods by UPLC-MS/MS  
..... LIN Yu-Qing LIU Zheng-Cai ZHENG Zi-Wei LIN Zhi-Dong WANG Dan-Hong

### ◎ Research Notes

- 92 Identification of a Potential Invasive Pest *Microprilus Rufulus* (Motschulsky, 1863)  
..... GUO Lei LIN Wei XU Miao-Feng LIU Ruo-Si