

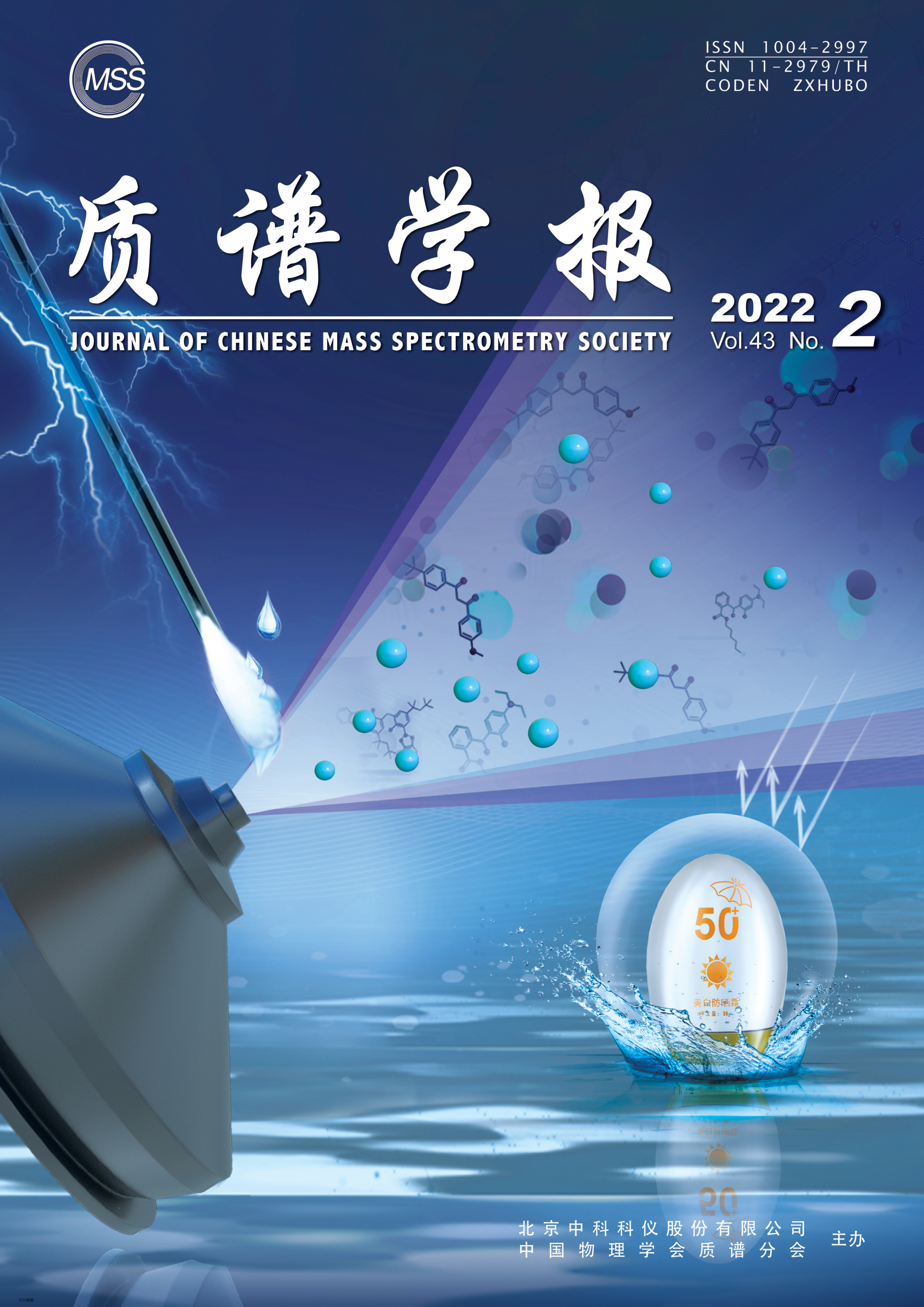


ISSN 1004-2997
CN 11-2979/TH
CODEN ZXHUBO

质谱学报

JOURNAL OF CHINESE MASS SPECTROMETRY SOCIETY

2022 2
Vol.43 No.



北京中科科仪股份有限公司 主办
中国物理学会质谱分会

目 次

前沿评述

厦门大学杭纬课题组——单细胞质谱成像技术的新进展 再帕尔·阿不力孜(131)

研究报告

MALDI-TOF MS 基质 HCCA 与含巯基生命物质加成反应的质谱研究 李 静,任其龙,潘远江(133)

柴胡皂苷 D 对小鼠乳腺癌治疗过程中的药物代谢影响研究
..... 赵明月,侯玉珠,刘 鑫,王 洋,孙开菊,庞 博,刘淑莹,李 丹,苏 蕊(142)

研究简报

基于 UPLC-Q-Extractive Orbitrap MS 鉴定姜黄提取物在大鼠体内的代谢产物
..... 王 媛,刘美娟,王宏进,殷光玲,李 妍,张旭光,孙立新(155)

煤矿区地表土中烷基多环芳烃的定量方法研究 钱雅慧,汪 婷,洪秀萍,罗钟庚,梁汉东(168)

拭子喷雾电离-四极杆/静电场轨道阱高分辨质谱法快速筛查化妆品中 19 种防晒剂
..... 闫萌萌,回相宜,郭兴洲,陈 萌,雷海民,厉 欣,马 强(178)

基于 GC-MS 和 LC-MS 的人参冰酒成分分析
..... 吴泳锡,张美玉,王一竹,李方形,刘 明,戴雨霖,郑 飞,越 皓(189)

多肽间非共价作用的质谱研究 蒲 玲,胡子峰,李 萌,朱佳奇,丁传凡(201)

技术交流

方解石-白云石混合物碳、氧同位素组成的 Gasbench-IRMS 选择性酸提取法研究
..... 韩 娟,刘汉彬,金贵善,张建锋,李军杰,张 佳,石 晓(210)

PreCon-IRMS 测定土壤游离氨基酸态氮稳定同位素丰度
..... 贺 珍,袁红朝,张丽萍,耿梅梅,许丽卫,陈 闻,彭 灿,王久荣(220)

快速 GC-SPI-TOF MS 走航监测大气中挥发性有机物
..... 刘 巍,朱颖杰,华道柱,陈志强,崔婷婷,方镜尧,翁兴彪,刘维屏(228)

LC-MS/MS 分析结合优化提取工艺探究啤酒中麸质蛋白 于欣禾,李明慧,孙 珍(242)

直接进样-超高效液相色谱-串联质谱法同时测定水中 14 种有机污染物
..... 叶燕慧,刘阳春,王东霞,赵红磊,郭 伟(252)

期刊基本参数:CN 11-2979/TH * 1980 * b * A4 * 452 * Zh * P * ¥30.00 * 800 * 13 * 2022-03

本期执行编委:郭寅龙,李金英,宋凤瑞

本期责任编辑:沈 莹,王迎真,骆淑莉

CONTENTS

Frontier Commentary

New Developments in Single-Cell Mass Spectrometry Imaging in Wei Hang's Group at Xiamen University ABLIZ Zeper(131)

Research Reports

Mass Spectrometric Studies on the Addition Reaction of HCCA and Sulfhydryl-Containing Living Substance in MALDI-TOF MS Analysis LI Jing, REN Qi-long, PAN Yuan-jiang(133)
Metabolomics of Mice Serum Analysis to Assess the Effects of Saikosaponin D on Breast Cancer ZHAO Ming-yue, HOU Yu-zhu, LIU Xin, WANG Yang, SUN Kai-ju, PANG Bo, LIU Shu-ying, LI Dan, SU Rui(142)

Brief Research Reports

Identification of Metabolites of Turmeric Extract in Rats by UPLC-Q-Extractive Orbitrap MS WANG Yuan, LIU Mei-juan, WANG Hong-jin, YIN Guang-ling, LI Yan, ZHANG Xu-guang, SUN Li-xin(155)
Quantitative Method of Alkyl Polycyclic Aromatic Hydrocarbons in Surface Soils of Coal Mines QIAN Ya-hui, WANG Ting, HONG Xiu-ping, LUO Zhong-geng, LIANG Han-dong(168)
Rapid Screening of 19 UV Filters in Cosmetics Using Swab Touch Spray Ionization Coupled with Quadrupole/Orbitrap High-Resolution Mass Spectrometry YAN Meng-meng, HUI Xiang-yi, GUO Xing-zhou, CHEN Meng, LEI Hai-min, LI Xin, MA Qiang(178)
Component Analysis of Ginseng Ice Wine by GC-MS and LC-MS WU Yong-xi, ZHANG Mei-yu, WANG Yi-zhu, LI Fang-tong, LIU Ming, DAI Yu-lin, ZHENG Fei, YUE Hao(189)
Study on Non-covalent Interaction of Polypeptides by Mass Spectrometry PU Ling, HU Zi-feng, LI Meng, ZHU Jia-qi, DING Chuan-fan(201)

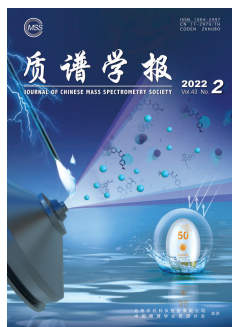
Technical Notes

Carbon and Oxygen Isotope Analysis of Calcite and Dolomite Mixtures Using Selective Acid Extraction by Gasbench-IRMS HAN Juan, LIU Han-bin, JIN Gui-shan, ZHANG Jian-feng, LI Jun-jie, ZHANG Jia, SHI Xiao(210)
Nitrogen Stable Isotope Determination in Soil Free Amino Acid-N by PreCon-IRMS System HE Zhen, YUAN Hong-zhao, ZHANG Li-ping, GENG Mei-mei, XU Li-wei, CHEN Wen, PENG Can, WANG Jiu-rong(220)
Fast GC-SPI-TOF MS for On-board Monitoring of Volatile Organic Compounds in Air LIU Wei, ZHU Ying-jie, HUA Dao-zhu, CHEN Zhi-qiang, CUI Ting-ting, FANG Jing-yao, WENG Xing-biao, LIU Wei-ping(228)
Analysis of the Gluten Map in Beers by LC-MS/MS Combined with Optimized Extraction Protocol YU Xin-he, LI Ming-hui, SUN Zhen(242)
Simultaneous Determination of 14 Organic Pollutants in Water by Direct Injection-Ultra High Performance Liquid Chromatography Tandem Mass Spectrometry YE Yan-hui, LIU Yang-chun, WANG Dong-xia, ZHAO Hong-lei, GUO Wei(252)

Serial Parameters: CN 11-2979/TH * 1980 * b * A4 * 452 * Zh * P * ¥30.00 * 800 * 13 * 2022-03

Execution Editorial Board: GUO Yin-long, LI Jin-ying, SONG Feng-ru

Editors in Responsibility: SHEN Ying, WANG Ying-zhen, LUO Shu-li



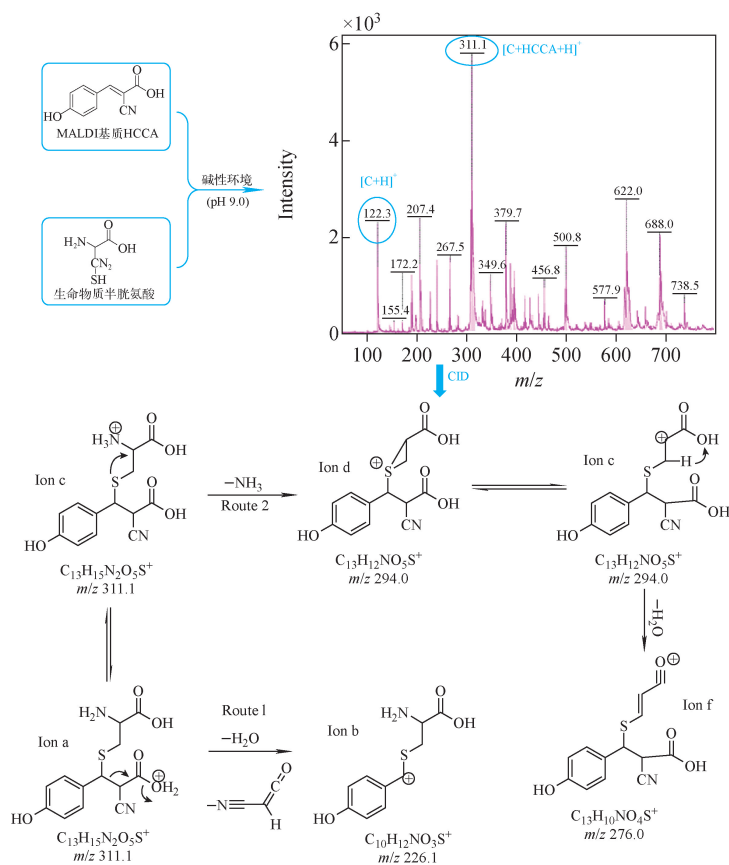
封面故事

拭子喷雾电离作为一种新型原位电离技术,可将采样、萃取和电离整合为一步完成,免除繁琐耗时的样品前处理和色谱分离过程,实现简便快速的质谱分析。将拭子喷雾电离与四极杆/静电场轨道阱高分辨质谱相结合,可用于化妆品中多种防晒剂组分的快速精准筛查,为化妆品质量安全管控和政府监管提供科学依据和技术支撑(参见 178~188 页)。

2022, 43(2): 133-141

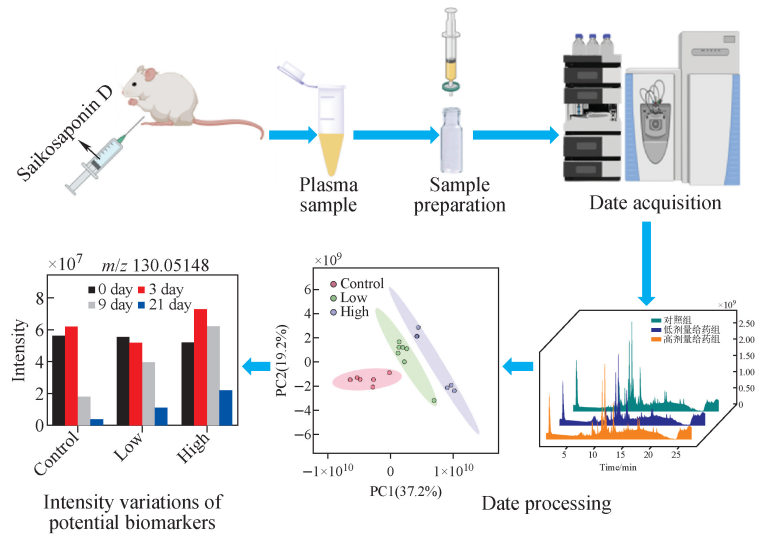
doi: 10. 7538/zpzb. 2021. 0064

MALDI-TOF MS 基质 HCCA 与含巯基生命物质加成反应的 质谱研究



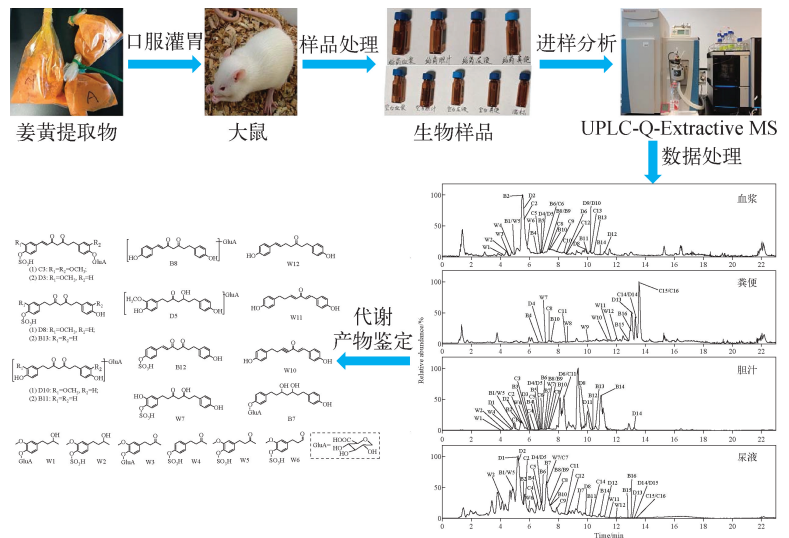
李 静, 任其龙, 潘远江

柴胡皂苷 D 对小鼠乳腺癌治疗过程中的药物代谢影响研究



赵明月,侯玉珠,刘鑫,王洋,
孙开菊,庞博,刘淑莹,李丹,
苏蕊

基于 UPLC-Q-Extractive Orbitrap MS 鉴定姜黄提取物在大鼠体内的代谢产物

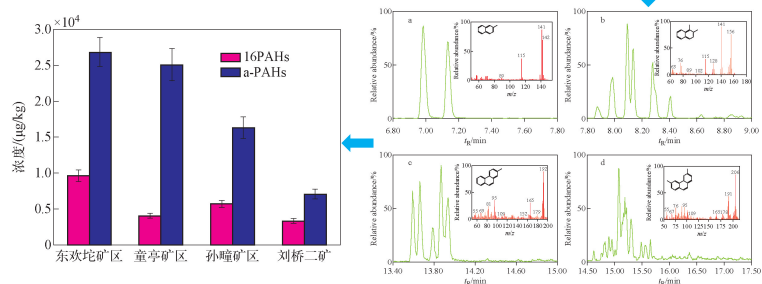
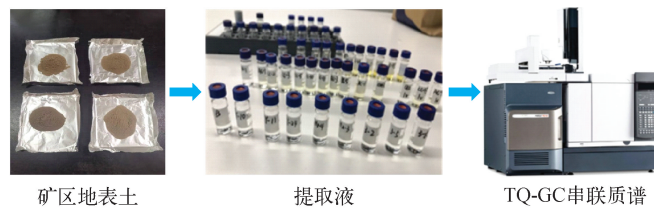


王媛,刘美娟,王宏进,殷光玲,
李妍,张旭光,孙立新

2022,43(2):168-177

doi:10.7538/zpxb.2021.0065

煤矿区地表土中烷基多环芳烃的定量方法研究

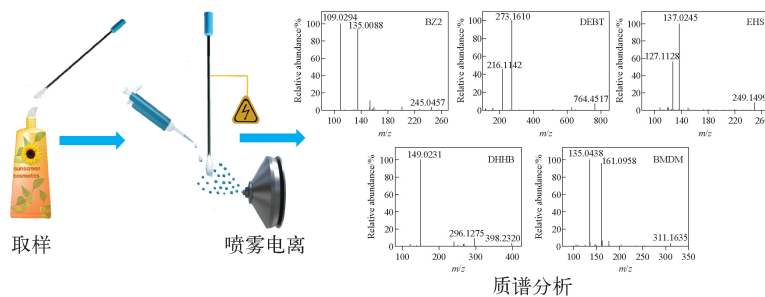


钱雅慧, 汪婷, 洪秀萍, 罗钟庚, 梁汉东

2022,43(2):178-188

doi:10.7538/zpxb.2021.0050

拭子喷雾电离-四极杆/静电场轨道阱高分辨质谱法快速筛查化妆品中19种防晒剂

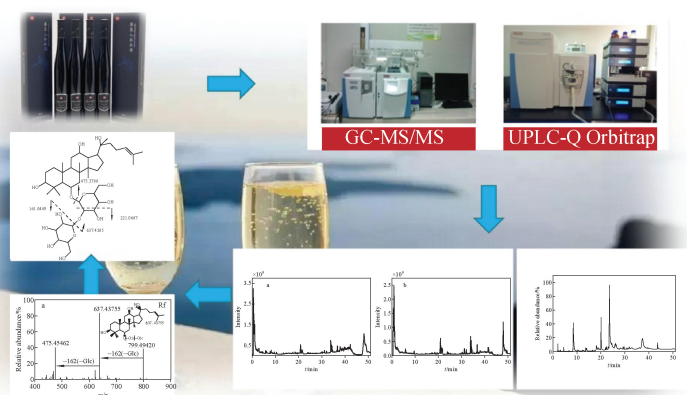


闫萌萌, 回相宜, 郭兴洲, 陈萌, 雷海民, 厉欣, 马强

2022,43(2):189-200

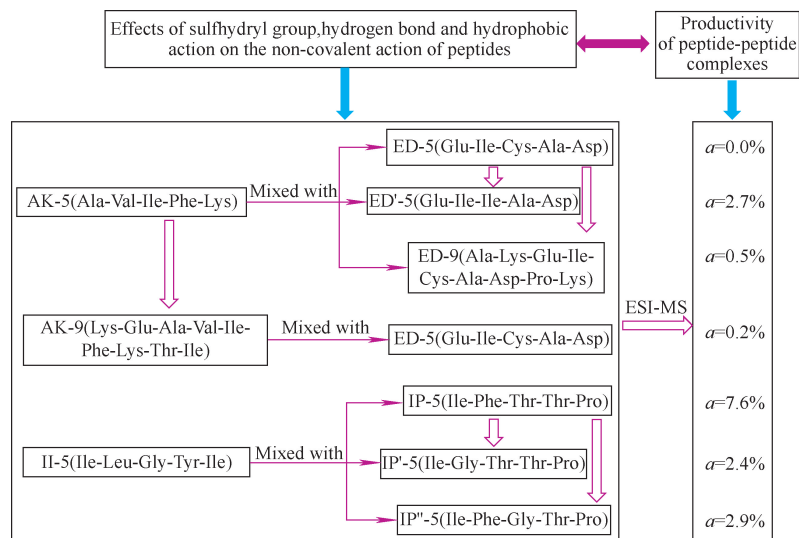
doi:10.7538/zpxb.2021.0028

基于GC-MS和LC-MS的人参冰酒成分分析



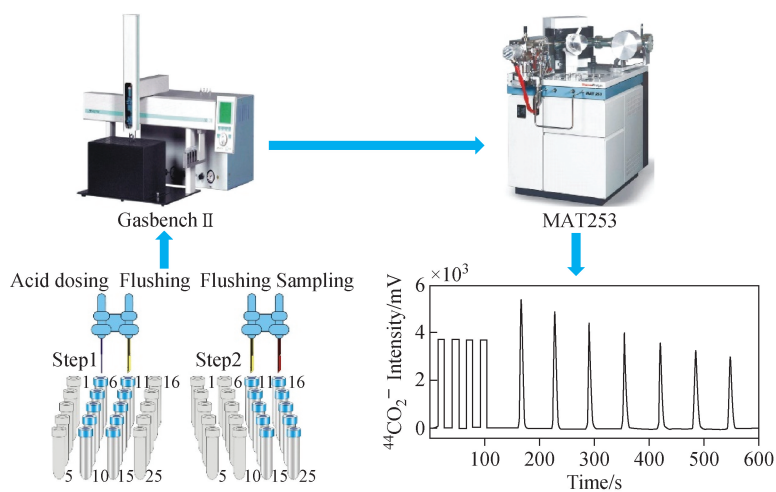
吴泳锡, 张美玉, 王一竹, 李方形, 刘明, 戴雨霖, 郑飞, 赵皓

多肽间非共价作用的质谱研究



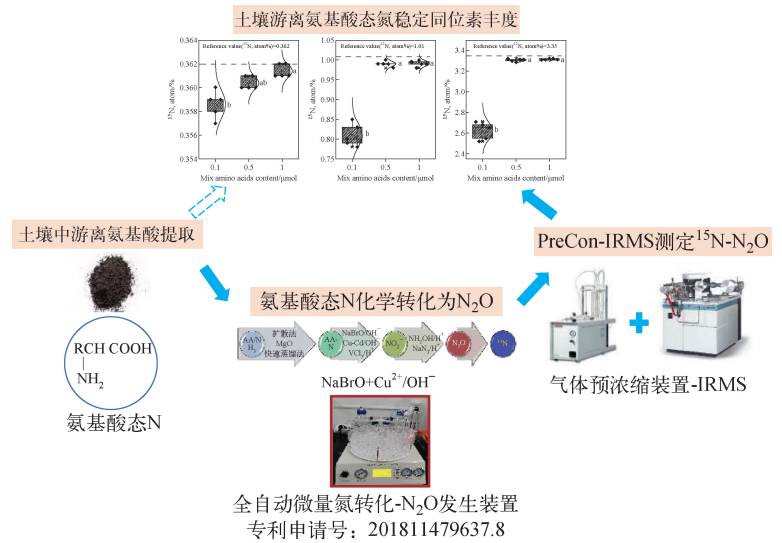
蒲玲,胡子峰,李萌,朱佳奇,丁传凡

方解石-白云石混合物碳、氧同位素组成的 Gasbench-IRMS 选择性酸提取法研究



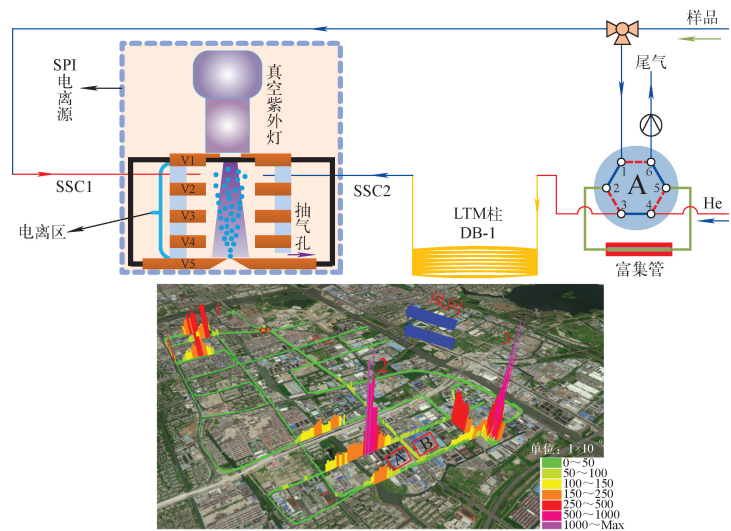
韩娟,刘汉彬,金贵善,张建锋,李军杰,张佳,石晓

PreCon-IRMS 测定土壤游离氨基酸态氮稳定同位素丰度



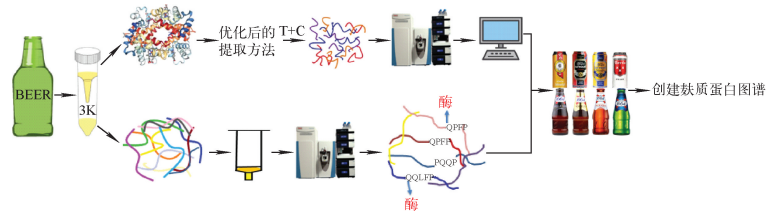
贺 珍,袁红朝,张丽萍,耿梅梅,
许丽卫,陈 闻,彭 灿,王久荣

快速 GC-SPI-TOF MS 走航监测大气中挥发性有机物



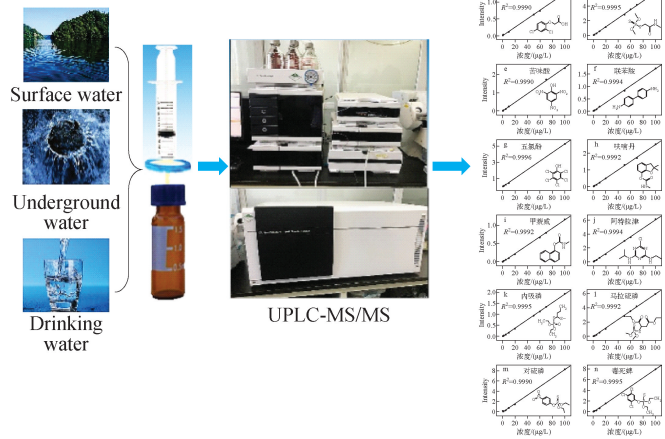
刘 巍,朱颖杰,华道柱,陈志强,
崔婷婷,方镜尧,翁兴彪,刘维屏

LC-MS/MS 分析结合优化提取工艺探究啤酒中麸质蛋白



于欣禾,李明慧,孙 珍

直接进样-超高效液相色谱-串联质谱法同时测定水中 14 种有机污染物



叶燕慧,刘阳春,王东霞,赵红磊,
郭 伟