

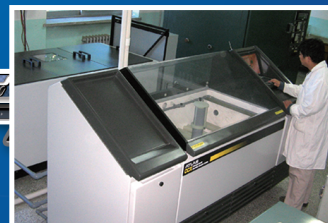
化学分析计量

Huaxue Fenxi Jiliang
CHEMICAL ANALYSIS AND METERAGE

惟实求真 · 公平公正

业务范围：

- 化学产品定性定量检测、未知样品剖析、仲裁鉴定
- 材料结构、化学成分、表面性能研究与测试
- 新药结构确认及化合物成分分析
- 化工产品开发、配方设计
- 环境试验与观测、材料及制品无损检测
- 材料动、静态力学性能测试
- 制品结构设计和受力分析计算
- 实验室建立、人员培训、技术咨询



科技要发展 · 计量须先行



国防科技工业应用化学一级计量站

地 址：山东省济南市天桥区田庄东路3号
通讯地址：山东省济南市108信箱
邮政编码：250031
传 真：0531-85062524
电 话：0531-85878040
网 址：www.i53.com.cn/
E-mail: cngci53@126.com



中国兵器工业集团第五三研究所 主办
(国防科技工业应用化学一级计量站)



2020 3
第29卷
· 双月刊 ·

样品处理

废弃线路板化学分析采样、制样及检测方法·····肖红新, 庄艾春 (90)

计量技术

基于液相色谱原理的黄曲霉毒素测定仪校准方法·····杨宇, 尚梦帆, 贾会, 等 (96)

实验室管理

鸡蛋中氟虫腈砷能力验证样品单元内与单元间均匀性评价案例与模型分析·····张会亮, 程琳, 高晓明, 等 (101)

药代动力学实验室液相色谱串联质谱仪期间核查方法的建立·····金冠钦, 孙黎, 王玉洪, 等 (107)

仪器设备

复合式气体报警器检定装置的研制·····刘溢舟, 杨曦, 马雅诗, 等 (113)

可移动式微量氧分析仪检定装置研制·····高捷, 隋峰, 郭波, 等 (119)

不确定度

芥子气纯度测定不确定度分析与评定·····唐慧, 黄永鹏, 孟祥燕, 等 (124)

电感耦合等离子体质谱法测定镍基高温合金中磷含量的不确定度评定·····墨淑敏, 李爱嫦, 张鑫, 等 (129)

综 述

氧弹分解-原子荧光法测定煤中汞的研究进展·····李和平, 石勇丽 (133)

铁矿石、锰矿石和铬矿石取样和样品制备技术概况·····郭成伟, 王欢, 蒋晓光, 等 (137)

《化学分析计量》

《化学分析计量》由中国兵器工业集团第五三研究所主办,是全国性分析测试、化学计量专业技术期刊,中国科技核心期刊,中国学术期刊综合评价数据库统计源期刊,中国仪器仪表学会分析仪器分会会刊,中国石油和化工行业优秀期刊,中国兵器工业优秀期刊,华东地区优秀期刊,入选美国 CA 千种表。

国内统一刊号: CN 37-1315/O6, 国际标准刊号: ISSN 1008-6145。双月刊, 大 16 开本。单月 20 日出版。

唯一投稿网址: www.cam1992.net; 微信公众号: chem_1992; 作者、读者 QQ 群: 285108594。

我社审稿周期为一个月, 稿件查询: 电话, 电子邮件, 微信, QQ 留言。电话: 0531-85878224, 85878132, 85878148。

2020 年第 3 期部分拟采用稿

二十二碳五烯酸甲酯国家标准样品的研制

六种有机磷混合溶液标准物质的研制

检验检测机构实验室风险管理的探究

食品检验检测机构实验室资源配置及匹配的策
略

液相色谱串联原子荧光光谱法测定水产品中无
机砷的不确定度评定

水泥中铬测定仪校准方法的研究

便携式拉曼光谱仪的校准

单一聚合度壳寡糖的色谱分离技术应用现状

土壤和沉积物中氯苯类化合物残留现状及分析
技术研究进展

等离子体质谱法测定二氧化铀-氧化铍芯块中
杂质元素

水杨酸分光光度法测定环保氨氮

高效液相色谱法测定更昔洛韦中 6 种特定杂质

毛细管-气相色谱法测定偏二甲肼中水



CHEMICAL
ANALYSIS AND
METERAGE
(CAM)

Bimonthly

(Started Publication in 1992)

Vol.29, No.3, 2020

(Series No.138)

Published on May 20, 2020

Superintended by

China North Industries Group Corporation

Sponsored by

CNGC Institute 53

Editor & Publisher

The Magazine House of

CHEMICAL ANALYSIS AND METERAGE

Director & Chief Editor Wang Jinli

Executive Chief Editor Gao Yingli

Add No.3 Tianjiazhuang East Road, Tianqiao
District, Jinan, China

Postcode 250031

Tel (+86-531)85878132 85878224
85878220 85878223

Fax (+86-531)85947355

E-mail anameter@126.com

http : // www.cam1992.net

Distributor Abroad

China International Book Trading Corporation
(P.O. Box 399, Beijing 100044, China)

Distributing Code Abroad 4794 BM

Unified Number of Print

ISSN 1008-6145

CN 37-1315/O6

Duty Editor Li Baozhi
Liu Lihong

Main Contents

Certified Reference Materials

- Preparation for solution standard substance of diflubenzuron in acetone.....
.....CAO Jinxi, LI Qiang, GU Hui(1)
- Preparation for standard substance of aflatoxin M1 residues in milk powder.....
.....WEI Min, ZHOU Jian, CHAI Yanbing, et al(6)

Analysis and Test

- Detection of anionic surfactants in water by air assisted dispersive liquid-liquid
microextraction-digital image colorimetry.....
.....JIN Chao, LUO Keju, YANG Xianshuang(11)
- Determination of 15 effective rare earth elements in bauxite by inductively coupled
plasma mass spectrometry.....
.....CHENG Xiang'en, YANG Huiling, BAN Junsheng, et al(16)
- Determination of nitrofurans residues in soil by ultra performance liquid chromato-
graphy.....Wurentuya, DENG Yu, RONG Di, et al(21)
- Determination of itaconic acid content in acrylonitrile-itaconic acid copolymer by
organic element analyzer.....LU Yi, WU Lijun, GUO Guojian, et al(26)
- Determination of silicon in high purity aluminum by inductively coupled plasma
atomic emission spectrometry.....XIE Wenbo, LI Gang, YANG Zheng, et al(30)
- Determination of ginsenoside Rb₁ in rat plasma by LC-MS/MS and its application
in pharmacokinetic study.....LI Shu, SHI Chao, GUO Yushu(34)
- Determination of platinum group elements in black shale by inductively coupled
plasma-mass spectrometry with lithium salt-nickel sulphide fire-assay.....
.....CHENG Zhiyan, LI Ding, KOU Yongqiang, et al(39)
- Simultaneous determination of four acrylate pesticides in soil by GC-MS.....
.....ZHANG Yanlin, SHEN Hemei(43)
- Determination of sulfur in soil by microwave digestion-inductively coupled plasma
atomic emission spectrometry.....WANG Xuefeng, WANG Jiajia(47)
- Determination of 7 mycotoxins in Leonurus Japonicus by solid phase extraction
combined with LC-MS-MS.....
.....ZHOU Ying, TANG Dengfeng, LI Wenting, et al(51)
- Determination of 26 impurities in zirconium diboride by inductively coupled plasma
atomic emission spectrometry.....
.....ZHAO Yonhong, FENG Haining, YANG Yongming(55)
- Improvement of Sulfide Calibration Method.....ZHANG Haitao, ZHAO Jingjing(60)
- Determination of trace aluminum in fried wheat flour food with inhibition fading
photometry.....DONG Wenli, XU Gang(64)

Determination of 12 solvents residues in glucose sodium chloride injection by headspace–gas chromatography.....
.....*HUANG Zhugang, LI Yanan, SUN Binbin, et al*(68)

Determination of total volatile organic compounds in printed matter by thermal desorption–gas chromatography.....
.....*JIANG Xiaohui, HOU Shanhua*(72)

Determination of diethyl maleate in laundry detergent by dispersed solid phase extraction–enhanced lipid removal–liquid chromatography–tandem mass spectrometry.....
.....*ZHU Hong, HUANG Rangming*(76)

Determination of arsenic and mercury synchronously in soils with dual-channel atomic fluorescence spectrometry.....
.....*ZHANG Min, LIU Wenjing*(81)

Determination of 7 kinds of benzene series compounds in air of closed space by gas chromatography.....
.....*ZHANG Hongbin, LONG Qingyun, WEI Guihuan, et al*(86)

Sample Processing

Sampling, sample preparation and testing methods for chemical analysis of discarded circuit boards.....
.....*XIAO Hongxin, ZHUANG Aichun*(90)

Measurement Technique

Calibration method of the aflatoxin tester based on principle of liquid chromatography.....
.....*YANG Yu, SHANG Mengfan, JIA Hui, et al*(96)

Laboratory Management

Case and model analysis of between-unit and within-unit homogeneity evaluation for the proficiency test sample of fipronil sulfone in eggs.....
.....*ZHANG Huiliang, CHENG Lin, GAO Xiaoming, et al*(101)

Establishment of intermediate verification method of liquid chromatography–tandem mass spectrometry in pharmacokinetics laboratory.....
.....*JIN Guanqin, SUN Li, WANG Yuhong, et al*(107)

Instrument and Equipment

Development for verification device of composite gas alarmer detectors.....
.....*LIU Yizhou, YANG Xi, MA Yashi, et al*(113)

Development of a movable verification device for trace oxygen analyzer.....
.....*GAO Jie, SUI Feng, GUO Bo, et al*(119)

Measurement Uncertainty

Uncertainty analysis and evaluation for purity determination of sulfur mustard.....
.....*TANG Hui, HUANG Yongpeng, MENG Xiangyan, et al*(124)

Uncertainty evaluation for the determination of phosphorus content in Ni-based superalloy by inductively coupled plasma mass spectrometry.....
.....*MO Shumin, LI Aichang, ZHANG Xin, et al*(129)

Summary

Research progress in determination of mercury in coal by oxygen bomb decomposition–atomic fluorescence spectrometry.....
.....*LI Heping, SHI Yongli*(133)

General situation of sampling and sample preparation technology of iron, manganese and chromium ores.....
.....*GUO Chengwei, WANG Huan, JIANG Xiaoguang, et al*(137)