



ISSN 1004-8685
CN 41-1192/R

中国卫生检验杂志

ZHONGGUO WEISHENG JIANYAN ZAZHI

2016年4月 第26卷 第8期

Apr.2016 Vol.26 No.8

国家卫生和计划生育委员会主管
中华预防医学学会主办

CHINESE
JOURNAL OF HEALTH
LABORATORY TECHNOLOGY

CJ
HLT

中国科技论文统计源期刊(中国科技核心期刊)

RCCSE 中国核心学术期刊

中国生物医学源期刊

美国化学文摘(CA)源期刊

中国学术期刊综合评价数据库源期刊

8

2016

ISSN 1004-8685



9 771004 868163

中华预防医学学会系列杂志
SERIAL JOURNAL OF CHINESE PREVENTIVE MEDICINE ASSOCIATION

中国卫生检验杂志

ZHONGGUO WEISHENG JIANYAN ZAZHI

半月刊 1991 年创刊 第 26 卷 第 8 期 2016 年 4 月 25 日出版

主管

中华人民共和国国家卫生和计划生育委员会
100044,北京市西城区西直门外南路 1 号

主办

中华预防医学会
100021,北京市朝阳区劲松东口华泰饭店

社长总编

张绍武

副社长

张甜 姜友珍

副总编

郁庆福 李桂英 张克荣

编辑部主任

杨锋

编辑

中国卫生检验杂志编委会

出版

中国卫生检验杂志社
450003 郑州市经一路 12 号 2288 信箱

编辑部电话

0371 - 65978342
0371 - 65968289 (传真)

广告部电话

0371 - 65998851
15538110112

出版日期

2016 年 4 月 25 日

发行

国内发行:北京市邮政局
邮发代号:80 - 152
国外发行:中国国际图书贸易总公司
(北京 399 信箱)
国外发行代号:M5752

中国标准连续出版物号

ISSN 1004 - 8685
CN 41 - 1192/R

广告经营许可证号

4100004000124

2016 年版权归中国卫生检验杂志社所有

定价

每期 21.50 元

目 次

论 著

陕西省市售蔬菜中镍含量调查及其健康风险评价

..... 聂晓玲,王敏娟,刘宇,等 (1065)

CD146 在卵巢上皮性癌及子宫内膜癌中的表达

..... 陈秀芹,葛倩倩,郭琦,等 (1069)

生活饮用水中 7 种酚类化合物残留的快速确证分析

..... 潘胜东,李小平,陈晓红,等 (1072)

组织块法结合胰蛋白酶消化法培养分离人口腔黏膜上皮细胞和成纤维

细胞 邵晓琳,赵雨,刘慢慢,等 (1076)

儿童尿液中 3 种邻苯二甲酸酯代谢产物的 GC - MS 检测方法研究

..... 王哲,陈崇新,王校,等 (1080)

2 776 例儿童急性呼吸道感染病原学检测

..... 张爱荣,范秋霞,许青霞 (1084)

化学测定方法

气相色谱 - 串联二级质谱法测定 PM2.5 中 3 种硝基多环芳烃

..... 张念华,应英,冯靓,等 (1087)

防晒霜的防晒效果测试及其紫外光降解产物的气相色谱 - 质谱法分析

..... 崔朋,方红霞,吴强林,等 (1089)

溶剂解吸 - 气相色谱法测定空气中的氯丙烯

..... 杨欢春,安晶晶,李晓娟 (1092)

本刊编委 (排名按笔画排列)

丁家华 仓公敖 方赤光 王哲
王大宁 王志玉 王京宇 王栩东
毋福海 冯晓燕 叶能权 毕永毅
刘秀梅 刘殿武 吕昌银 邱建城
任一平 孙长颖 孙成均 许春向
陈守建 何建国 何渐生 何晓青
李蓉 李磊 李晓虹 宋宏彬
吴清平 杨元 张曦 张贺秋
邹学贤 姜庆五 赵卓 赵雁林
高永清 贾珍珍 栗文元 凌文华
栾燕 徐东群 曹佳 曹润武
晁福寰 崔巍 常风启 黄国伟
康辉 康维钧 韩玉霞 曾现伟
窦志勇 濮萍 阚帆 廖百森
裴少军 裴晓方 谭晓东 熊英
潘慧 冀元棠

Editorial Board Member

DING Jia - hua, CANG Gong - ao, FANG Chi - guang, WANG Zhe, WANG Da - ning, WANG Zhi - yu, WANG Jing - yu, WANG Xu - dong, WU Fu - hai, FENG Xiao - yan, YE Neng - quan, BI Yong - yi, LIU Xiu - mei, LIU Dian - wu, LV Chang - yin, QI Jian - cheng, REN Yi - ping, SUN Chang - hao, SUN Cheng - jun, XU Chun - xiang, CHEN Shou - jian, HE Jian - guo, HE Zhe - sheng, HE Xiao - qing, LI Rong, LI Lei, LI Xiao - hong, SONG Hong - bin, WU Qing - ping, YANG Yuan, ZHANG Xi, ZHANG He - qiu, ZOU Xue - xian, JIANG Qing - wu, ZHAO Zhuo, ZHAO Yan - lin, GAO Yong - qing, JIA Zhen - zhen, LI Wen - yuan, LING Wen - hua, LUAN Yan, XU Dong - qun, CAO Jia, CAO Run - wu, CHAO Fu - huan, CUI Wei, CHANG Feng - qi, HUANG Guo - wei, KANG Hui, KANG Wei - jun, HAN Yu - xia, ZENG Xian - wei, DOU Zhi - yong, PU Ping, KAN Biao, LIAO Bai - sen, PEI Shao - jun, PEI Xiao - fang, TAN Xiao - dong, XIONG Ying, PAN Hui, JI Yuan - tang

网 址

www.zgwsjy.cn

投稿电子信箱

wsjyzz@126.com

印 刷

鑫宏源印刷包装有限责任公司

来稿咨询电话

010 - 84030401

流动注射法测定涉水产品浸泡液中的挥发酚

..... 丁杨, 邓美荣, 杨晓非, 等 (1095)

离子色谱 - 紫外检测法测定化妆品中巯基乙酸

..... 张立辉, 霍宗利 (1097)

离子色谱法测定工作场所空气中三氯化磷

..... 王梓蒙, 刘文羽, 陶墨奎, 等 (1099)

固相萃取 - 液相色谱 - 串联质谱法测定水中的 6 种雌激素

..... 刘达峰, 黎娟 (1102)

高效液相色谱法测定足光散中氧化苦参碱含量

..... 陈长水, 朱蓉 (1105)

食品与药品检验

高效液相色谱法快速测定胶囊壳中的 4 种合成降糖药

..... 滕军 (1107)

超高效液相色谱法检测花生油中 4 种黄曲霉毒素的含量

..... 甘仁榕, 彭澍宇, 肖靖松, 等 (1109)

全自动消解、蒸馏滴定法测定食品中蛋白质的含量

..... 蔡曦, 施家威 (1112)

固相萃取 - 气相色谱法测定食用油中对羟基苯甲酸酯

..... 陈东洋, 范翔, 张昊, 等 (1114)

微生物检测方法

应用线性探针方法快速检测结核分枝杆菌耐药性的效果评价

..... 赵竟男, 何旺瑞 (1117)

水产品中霍乱弧菌 4 种检测方法的效果比较

..... 谢朝梅, 肖慧芳, 刘保湘, 等 (1119)

临床检验

系统性红斑狼疮相关血浆 miRNA 的检测及其作为系统性红斑狼疮活动的评价

..... 徐玲娟, 章慧娣, 林巧爱, 等 (1122)

贝克曼 LH750 全自动血细胞分析仪应用效果评价	蒋义,孟宪辉,周湘红,等	(1126)
慢性阻塞性肺病患者血液前降钙素原、超敏 C 反应蛋白水平变化及其临床意义	张章国,张燕,李小燕,等	(1128)
血清 D - 二聚体、同型半胱氨酸和甲胎蛋白异质体联合检测对原发性肝癌诊断的临床意义	杨雅静,张玉敏,李玉柱,等	(1131)
血红蛋白电泳联合红细胞平均体积、红细胞脆性筛查地中海贫血的应用评价	邓敬仪,董慧敏,李小嫩,等	(1133)
血清甲状腺激素和同型半胱氨酸水平联合测定在甲状腺功能减退诊断中的作用	周春娟,朱小林,王成刚,等	(1136)
中老年急性脑梗死患者心肺功能 5 项检测的临床意义	邱毅	(1138)
中枢神经系统白血病患者脑脊液 SuPAR 水平变化及意义	方遒,曹丹,徐宝连,等	(1141)
539 例肝病患者肝纤维化相关指标聚类分析	于倩,王晔恺,王惠军	(1143)
临床常规 Rh 表型检测及配合性输血必要性和疗效探讨	沈健,施欣蔚,陈秉宇,等	(1146)
血型系统中罕见 B(A) 亚型的鉴定及血清学特性分析	林甲进,施顺秋,朱碎永,等	(1149)
血清低密度脂蛋白胆固醇直接测定法与 3 种公式计算法的比较	翁儿,裘海文,孙定和,等	(1151)
新生儿 ABO 溶血病患儿红细胞检测其血液中 IgG 亚型的应用	朱碎永,朱燕英,林甲进,等	(1154)

分子诊断与基因检测

2008 年 - 2012 年江西省麻疹病毒分离株 H 基因特征分析	施勇,熊英,李健雄,等	(1156)
食物中毒事件中奇异变形杆菌的分子分型及耐药性分析	李美华,曹春远,廖琳虹,等	(1161)

监测分析

北京市某区电镀厂周边居民主要膳食铬暴露风险评估	刘秀峰,陈东宛,吕金昌,等	(1163)
2012 年 - 2013 年石家庄市婴幼儿奶粉中铅、镉、汞、砷监测分析	马玲,杨立学,张莹	(1167)
2014 年北京市东城区从业人员丙氨酸氨基转移酶异常情况分析	孙志峰,满洋,成金栋	(1171)
2014 年重庆市食品微生物污染监测分析	何源,王红,刘晓朋,等	(1173)
2013 年 - 2015 年烟台市芝罘区游泳场所卫生监测结果分析	郭磊,张勇,于萍,等	(1177)
2012 年 - 2014 年江东区手足口病流行和病原学特征分析	陆璐,张立军,戎江瑞	(1180)
四川省腹泻患者和食品加工从业人员致泻性大肠埃希菌监测分析	吕虹,黄伟峰,黄玉兰,等	(1182)

调查报告

- 温岭市中老年人群高尿酸血症的相关因素分析 蔡丹红,盛明江,林艳,等 (1185)
海宁市不同人群梅毒预防知识知晓率调查 沈建芬,虞静,俞丽娜,等 (1188)
成都市水发食品中甲醛含量及膳食暴露评估 王瑶,李晓辉,刘艳,等 (1192)
青岛市市售肉制品中磷酸盐水平及健康风险评估 杨洁,杨钊,闫加省,等 (1195)
患者术前传染病患病率现状分析 王玲玲,贾海英,王昌敏 (1198)
潍坊地区献血者梅毒感染现状的调查与分析 李其田,张庆利 (1201)

细菌耐药性研究

- 新生儿重症监护病房患儿感染病原菌分布及耐药性分析 林华峰,孙红艳 (1203)

教学与实验室管理

- “水中甲醛检测”能力验证结果及分析 刘国云,贾伟,凌锋,等 (1205)
关于检测实验室 LIMS 系统确认工作的探讨 张艳,肖冻,田甜,等 (1207)
影响理化检验结果的主要因素及改进措施 刘克斌 (1209)

经验交流

- 反复血流感染食酸代尔夫特菌的报道 章秋霞,胡庆丰,俞俊臣,等 (1211)

短篇报道

- 平山县一起学校聚集性急性细菌性结膜炎的流行病学调查 赵孟奇,张云,宗雪梅,等 (1212)

综述

- 祛黄褐斑功能评价方法研究进展 孙红梅,罗蓉,赵敏,等 (1214)

责任编辑 张舒

责任校对 冯芳

英文编辑 张蒙

CHINESE JOURNAL OF HEALTH LABORATORY TECHNOLOGY

Semimonthly Established in 1991, Volume 26 Number 8 April 25, 2016

Managed by

National Health and Family Planning Commission
of the People's Republic of China
No. 1, Xizhimen Wainan Road, Xicheng District, Beijing, 100044

Sponsored by

Chinese Preventive Medicine Association
Hua Tai Hotel, East Exit of Jinong Road, Chaoyang District, Bei-
jing, 100021

Editor in Chief

ZHANG Shao - wu

Deputy Chairman

ZHANG Tian, JIANG You - zhen

Associate Editor in Chief

YU Qing - fu, LI Gui - ying, ZHANG Ke - rong

Director of Editorial Department

YANG Feng

Edited by

Editorial Board of Chinese Journal of Health Laboratory Technology

Published by

Editorial Department of Chinese Journal of Health Laboratory Technology
Mailbox 2288, No. 12, Jingyi Road, Zhengzhou, 450003

Editorial office telephone

0371 - 65978342
0371 - 65968289(Fax)

Advertising department telephone

0371 - 65998851
15538110112

Publication Date

April 25, 2016

Domestic Distributor

Beijing Post Bureau
Code: 80 - 152

Overseas Distributor

China International Book Trading Corporation
(P. O. Box 399, Beijing, China)
Code: M5752

Website

www.zgwsjy.cn

E - mail

wsjyzz@126.com

Standard Series Number

ISSN 1004 - 8685
CN 41 - 1192/R

Advertising Management License

4100004000124

Copyright 2016 by Editorial Department of
Chinese Journal of Health Laboratory Technology

Price

RMB ¥ 21.50

CONTENTS IN BRIEF

Original Articles

- Surveillance on the contents of nickel in commercial vegetables and health risk evaluation in Shaanxi province** NIE Xiao - ling, WANG Min - juan, LIU Yu, et al (1065)
- Expression of CD146 in the epithelial ovarian cancer and endometrial cancer** CHEN Xiu - qin, GE Qian - qian, GUO Qi, et al (1069)
- Rapid identification and analysis of 7 residues of phenolic compounds in drinking water** PAN Sheng - dong, LI Xiao - ping, CHEN Xiao - hong, et al (1072)
- Cultivation and isolation of epithelium and fibroblasts of human oral mucosa with tissue explants method combined with enzymatic digestion method** SHAO Xiao - lin, ZHAO Yu, LIU Man - man, et al (1076)
- Determination of 3 phthalate metabolites in children urine by GC - MS** WANG Zhe, CHEN Chong - xin, WANG Xiao, et al (1080)
- Pathogenic determination of acute respiratory infection in 2 776 children** ZHANG Ai - Rong, FAN Qiu - Xia, XU Qing - Xia (1084)
- Chemical Detection Method**
- Determination of 3 nitro - polycyclic aromatic hydrocarbons in PM2.5 by gas chromatography - stage 2 tandem mass** ZHANG Nian - hua, YING Ying, FENG Liang, et al (1087)
- Sunscreen effects test of sunscreen cream and GC - MS analysis of UV degradation products** CUI Peng, FANG Hong - xia, WU Qiang - lin, et al (1089)

- Determination of allyl chloride in air by solvent desorption – gas chromatography**
..... YANG Huan – chun, AN Jing – jing, LI Xiao – juan (1092)
- Determination of volatile phenols in soaked liquid of wading products by flow injection technology**
..... DING Yang, DENG Mei – rong, YANG Xiao – fei, *et al* (1095)
- Determination of thioglycolic acid in cosmetics by ion chromatography with ultraviolet**
..... ZHANG Li – hui, HUO Zong – li (1097)
- Determination of phosphorus trichloride in the air of workplace by ion chromatography**
..... WANG Zi – meng, LIU Wen – yu, TAO Mo – kui, *et al* (1099)
- Determination of 6 estrogens in water by liquid chromatography – tandem mass spectrometry**
..... LIU Da – feng, LI Juan (1102)
- Determination of oxymatrine content in Zuguangsan by HPLC** CHEN Chang – shui, ZHU Rong (1105)

Food and Drug Inspection

- Rapid determination of four synthetic hypoglycemic chemicals in capsule shell by high performance liquid chromatography**
..... TENG Jun (1107)
- Determination of aflatoxin content in peanut oil by UPLC**
..... GAN Ren – rong, PENG Liu – yu, XIAO Jing – song, *et al* (1109)
- Determination of protein content in food by automatic digestion, distillation and titration** CAI Xi, SHI Jia – wei (1112)
- Determination of parahydroxybenzoate ester in edible oil by SPE – GC**
..... CHEN Dong – yang, FAN Xiang, ZHANG Hao, *et al* (1114)

Microbe Detection Method

- Evaluation on the line probe assay for rapid detection of *Mycobacterium tuberculosis* strains resistance in JiangXi**
..... ZHAO Jing – nan, HE Wang – rui (1117)
- Comparison on the test effect of *Vibrio cholera* in aquatic products with the 4 methods**
..... XIE Chao – mei, XIAO Hui – fang, LIU Bao – xiang, *et al* (1119)

Clinical Laboratory Test

- Detection of SLE plasma miRNA and the its assessment in SLE activity**
..... XU Ling – juan, ZHANG Hui – di, LIN Qiao – ai, *et al* (1122)
- Application evaluation of the Beckman automatic LH750 blood cell analyzer**
..... JIANG Yi, MENG Xian – hui, ZHOU Xiang – hong, *et al* (1126)

PCT and hs - CRP levels in patients' blood with acute exacerbation of COPD and the clinical significance	.....	ZHANG Zhang - guo, ZHANG Yan, LI Xiao - yan, <i>et al</i> (1128)
Diagnostic value of D - dimer, homocysteine and AFP - L3 in primary hepatic cancer	.....	YANG Ya - jing, ZHANG Yu - min, LI Yu - zhu, <i>et al</i> (1131)
The application evaluation of combined test of hemoglobin electrophoresis, MCV and red cell osmotic fragility in the screening of thalassemia	.....	DENG Jing - yi, DONG Hui - min, LI Xiao - nen, <i>et al</i> (1133)
The diagnosis value of combined detection of TH and Hcy levels for patients with hypothyroidism	.....	ZHOU Chun - juan, ZHU Xiao - lin, WANG Cheng - gang, <i>et al</i> (1136)
The detection of five heart and lung function indexes in elder patients with acute cerebral infarction and its clinical significance	.....	QIU Yi (1138)
Changes and significance of CSF SuPAR levels in patients with CNSL	... FANG Qiu, CAO Dan, XU Bao - lian, <i>et al</i>	(1141)
A clustering analysis of the relevant indicators in 539 patients with hepatopathy	.....	YU Qian, WANG Ye - kai, WANG Hui - jun (1143)
Research on the necessity of Rh detection and the effect of blood transfusion	.....	SHEN Jian, SHI Xin - wei, CHEN Bing - yu, <i>et al</i> (1146)
Identification of B(A) subtype in blood types and its serological analysis	.....	LIN Jia - jin, SHI Shun - qiu, ZHU Sui - yong, <i>et al</i> (1149)
Comparison of there equation calculation methods with direct measurement of low - density lipoprotein cholesterol	.....	WENG Er, QIU Hai - wen, SUN Ding - he, <i>et al</i> (1151)
Application of red blood cell in the detection of IgG subtype in the blood of neonates with ABO hemolytic disease	.....	ZHU Sui - yong, ZHU Yan - ying, LIN Jia - jin, <i>et al</i> (1154)
Molecular Diagnosis and Gene Detection		
Analysis of genetic characteristics of H gene from measles viruses isolates in Jiangxi province from 2008 to 2012	.....	SHI Yong, XIONG Ying, LI Jian - xiong, <i>et al</i> (1156)
Study on the molecular typing and drug resistance of <i>Proteus mirabilis</i> from food poisoning event	.....	LI Mei - hua, CAO Chun - yuan, LIAO Lin - hong, <i>et al</i> (1161)
Monitoring and Analysis		
Evaluation on the main dietary exposure of chromium to residents in area nearby electroplating factory in a district of Beijing	.....	LIU Xiu - feng, CHEN Dong - wan, LV Jin - chang, <i>et al</i> (1163)
Monitoring and analysis of Pb, Cd, Hg and As in infant formula milk powder in Shijiazhuang during 2012 - 2013	.....	MA Ling, YANG Li - xue, ZHANG Ying (1167)

Analysis of ALT abnormality among practitioners in Dongcheng district of Beijing in 2014	.....	SUN Zhi - feng, MAN Yang, CHENG Jin - dong (1171)
Monitoring and analysis of microorganism contamination in food in Chongqing in 2014	.....	HE Yuan, WANG Hong, LIU Xiao - peng, et al (1173)
Analysis of sanitation monitoring results of swimming places in Zhifu district of Yantai during 2013 – 2015	.....	GUO Lei, ZHANG Yong, YU Ping, et al (1177)
Analysis of epidemiological and etiological features of HFMD in Jiangdong district during 2012 – 2014	.....	LU Lu, ZHANG Li - jun, RONG Jiang - rui (1180)
Monitoring and analysis of diarrheogenic <i>Escherechia coli</i> of patients with diarrhoeal and food processing practitioners in Sichuan	.....	LV Hong, HUANG Wei - feng, HUANG Yu - lan, et al (1182)

Investigation Report

Related factors analysis of high uric acid hematic disease in aged people of Wenling	.....	CAI Dan - hong, SHENG Ming - jiang, LIN Yan, et al (1185)
Investigation on the awareness rate of syphilis prevention knowledge among different groups of people in Haining	.....	SHEN Jian - fen, YU Jing, YU Li - na, et al (1188)
Assessment on the dietary exposure and the formaldehyde content in soaked food in Chengdu	.....	WANG Yao, LI Xiao - hui, LIU Yan, et al (1192)
Health risk assessment and detection of phosphates levels in meat products sold in Qingdao	.....	YANG Jie, YANG Zhao, YAN Jia - xing, et al (1195)
Analysis of the infection status for patients before operation	.....	WANG Ling - ling, JIA Hai - ying, WANG Chang - min (1198)
Investigation and analysis of syphilis infection in blood donors in Weifang	.....	LI Qi - tian, ZHANG Qing - li (1201)

Bacterial Resistance Research

Pathogen distribution and drug resistance analysis of the newborn in NICU	LIN Hua - feng, SUN Hong - yan (1203)
--	-------	---------------------------------------

Editor in Charge ZHANG Shu

Responsibility of Proofreading FENG Fang

English Editor ZHANG Meng

雅培高效血液分析解决方案 使血液学检测更加流畅

CELL-DYN Ruby

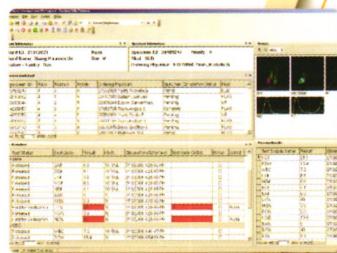
血液分析仪

- MAPSS技术
- 全光学法



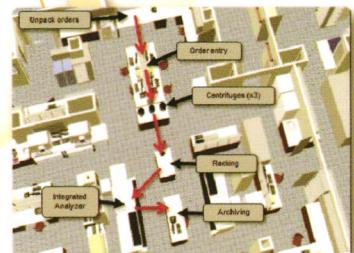
雅培“红宝石”血液分析仪

- 高一次性通过率
- 仅需三种试剂
- 双角度光学血小板



智能化中间管理软件

- 跨实验室连接
- 提高运营效率



个性化流程分析

- 流程优化
- 空间扩展



实验室专业技术人员

- 有限资源
- 专业知识

详情请电邮: abbottsciences.cn@abbott.com

智能化中间管理软件非“红宝石”血液分析仪自带软件

雅培客户支持中心: 400 88988 06

产品名称: 血液分析仪 (CELL-DYN Ruby) 注册证号: 国食药监械(进)字2013第2401248号 生产企业: 美国Abbott Laboratories
广告审批号: 沪医械广审(文)第2013040254号

雅培

Put science on your side.

 Abbott
A Promise for Life