

中文核心期刊

中国科技核心期刊

Scopus数据库收录期刊

CSCD收录期刊

WJCI报告收录期刊

ISSN 1000-1158



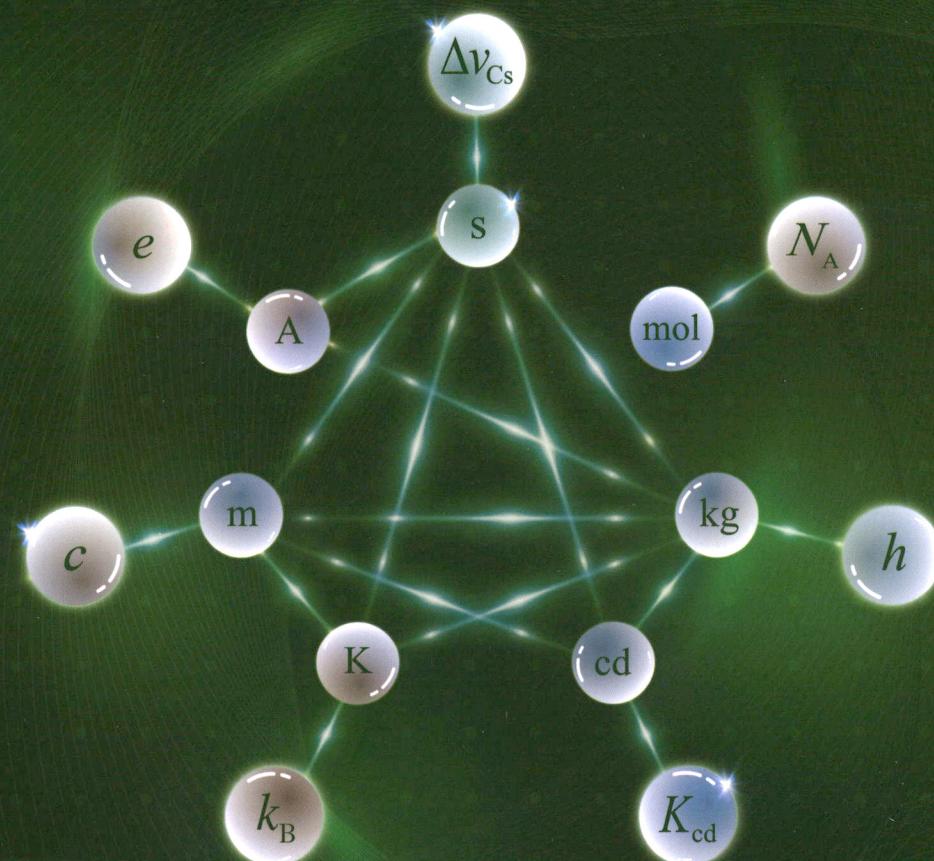
/TB

Q K 2 3 0 1 4 4 7

计量学报

ACTA METROLOGICA SINICA

第44卷 第5期 2023 VOL. 44 No. 5



ISSN 1000-1158



9 771000 115230



万方数据

中国计量测试学会

计量学报

JILIANG XUEBAO

第44卷 第5期 2023年5月

目 次

基于 Cr 原子光刻技术的 nm 光栅间距比对测量定值方法研究

..... 陈凯晴, 管钰晴, 邹文哲, 邓晓, 孔明, 陈雅晴, 熊英凡, 傅云霞, 雷李华 (671)

基于 ABiGRU 的铣刀磨损监测方法研究

..... 刘超, 王宸, 张秀峰, 鲁旭祥 (679)

基于外包络点的最小外接圆误差快速评定方法

..... 干江红, 汪洁, 许美红 (687)

基于改进 Census 变换的鲁棒立体匹配算法

..... 乔景慧, 韩玉明, 张啸涵 (694)

手机曲面玻璃缺陷检测方法研究

..... 陈宁, 郭钢祥, 郭斌, 张跃, 王超, 孔明, 陈挺, 王瑛辉, 赵健铭, 吴键 (701)

金刚石氮-空位色心连续式温度测量灵敏度分析

..... 邢力, 冯晓娟, 张金涛 (707)

基于微波谐振腔的管内流体温度测量方法研究

..... 李勤勤, 王天琦, 于昊言, 边闯, 李真 (714)

双红外激光测温定标源样品温度场对测量结果的影响

..... 顾青桃, 王鑫宇, 安保林, 翟慧星, 董伟, 王瑞祥 (722)

超声波峰谷拟合方法及平面叶栅通道二维流速测量

..... 却依飞, 俞天阳, 张世玮, 马良, 苏明旭 (729)

基于多层加权复杂网络的气液两相流流型分析

..... 张立峰, 王智, 张启亮 (735)

2~4 MPa 燃气流量标准装置不确定度评估及验证

..... 张翰, 王亮, 黄冬虹, 董新利, 李春辉, 李勇, 董向民, 赵柳, 张倩 (743)

零线断接对三相四线电能表计量影响机理分析

..... 刁瑞朋, 王强, 卢志俊 (750)

基于边缘计算的电动汽车换电电池冗余度建模分析

..... 谢虎, 陈志伟, 郭文鑫, 赵瑞锋, 刘洋 (758)

Nb/Al-Al_xO_y/Nb 约瑟夫森结薄膜沉积研究

..... 高鹤, 王仕建, 徐达, 李劲劲, 王雪深, 钟青 (765)

关于表计输入阻抗在直流高压分压器检定校准中的影响分析

..... 刘方明, 肖凯, 王海燕, 刘浩, 匡义 (771)

矢量网络分析仪的眼图交叉点估计方法

..... 高强, 马世敏, 刘杰 (777)

西门子大孔径 CT 模拟定位机 CT 值影响因素及其长期稳定性研究

..... 胡金有, 邹炼, 谢朝, 骆科林, 殷云鹏, 张薇莎 (783)

钼靶 X 射线空气比释动能的国际关键比对

..... 王继, 吴金杰, 郭思明, 刘莹, 王培玮 (790)

基于 TRS-483 报告的小野输出因子测量与验证研究

..... 张曦, 王志鹏, 王坤, 黄骥, 齐雅平, 刘福斌, 金孙均 (796)

基于 WOA-LSSVM 模型的近临界区 CO₂ 物性预测

..... 贺三, 唐凯, 张茂超, 薛雅文, 薛世奇 (803)

SO₂ 和 NO 混合标准气体在生态环境监测实验室比对中的应用

..... 吴晓凤, 王德发, 吴海, 吕怡兵 (810)

RNA 内参在转录组测序质量控制中的应用

..... 张瑜, 王霞, 张永卓, 杨佳怡, 牛春艳, 赵洋, 董莲华 (818)

新型冠状病毒 B.1.1.7 变异株特异性数字 PCR 定量方法研究

..... 王霞, 郭若晖, 董莲华 (826)

国际单位制(SI)词头发展简史

..... 理查德·布朗. 翻译: 任思源, 于连超. 校对: 张爱敏 (495)

ACTA METROLOGICA SINICA

(MONTHLY)

Vol. 44, No. 5, May 2023

CONTENTS

- Research on the Method of Nanometer Grating Spacing Comparison Measurement Based on Cr Atomic Lithography Technology CHEN Kai-qing, GUAN Yu-qing, ZOU Wen-zhe, DENG Xiao, KONG Ming, CHEN Ya-qing, XIONG Ying-fan, FU Yun-xia, LEI Li-hua (671)
- A Milling Cutter Wear Monitoring Method Based on ABiGRU LIU Chao, WANG Chen, ZHANG Xiu-feng, LU Xu-xiang (679)
- A Fast Minimum Circumscribed Circle Error Evaluation Method Based on Outer Enveloping Points GAN Jiang-hong, WANG Jie, XU Mei-hong (687)
- Robust Stereo Matching Algorithm Based on Improved Census Transform QIAO Jing-hui, HAN Yu-ming, ZHANG Xiao-han (694)
- Study on Defects Detection Method of Mobile Phone Curved Glass CHEN Ning, GUO Gang-xiang, GUO Bin, ZHANG Yue, WANG Chao, KONG Ming, CHEN Ting, WANG Ying-hui, ZHAO Jian-ming, WU Jian (701)
- Analysis of Continuous Temperature Measurement Sensitivity Based on Nitrogen-vacancy Centers in Diamond XING Li, FENG Xiao-juan, ZHANG Jin-tao (707)
- Temperature Measurement of Fluid in a Tube Using a Microwave Cylindrical Cavity Resonator Sensor LI Qin-qin, WANG Tian-qi, YU Hao-yan, BIAN Chuang, LI Zhen (714)
- Influence of Sample Temperature Field of Double Infrared Laser Temperature Calibration Source on Measurement Results GU Qing-tao, WANG Xin-yu, AN Bao-lin, ZHAI Hui-xing, DONG-Wei, WANG Rui-xiang (722)
- Ultrasonic Waves Peak-valley Fitting Method and Two-Dimensional Flow Velocity Measurement in Planar Cascade QUE Yi-fei, YU Tian-yang, ZHANG Shi-wei, MA Liang, SU Ming-xu (729)
- Gas-liquid Two-Phase Flow Pattern Analysis Based on Multilayer Weighted Complex Network ZHANG Li-feng, WANG Zhi, ZHANG Qi-liang (735)
- Uncertainty Evaluation and Verification of 2 ~ 4 MPa Gas Flow Standard Facility ZHANG Han, WANG Liang, HUANG Dong-hong, DONG Xin-li, LI Chun-hui, LI Yong, DONG Xiang-min, ZHAO Liu, ZHANG Qian (743)
- Mechanism of the Disconnection of the Neutral Wire on the Measurement of the Three-phase Four-wire Electric Energy Meter DIAO Rui-peng, WANG Qiang, LU Zhi-jun (750)
- Modeling and Analysis of Redundancy of Battery Replacement for Electric Vehicles Based on Edge Computing XIE Hu, CHEN Zhi-wei, GUO Wen-xin, ZHAO Rui-feng, LIU Yang (758)
- Study of the Deposition of Nb/Al-Al₂O₃/Nb Josephson Junction Trilayer GAO He, WANG Shi-jian, XU Da, LI Jin-jin, WANG Xue-shen, ZHONG Qing (765)
- The Influence of Digital Multimeter Input Impedance in DC High Voltage Dividers Measurement LIU Fang-ming, XIAO Kai, WANG Hai-yan, LIU Hao, KUANG Yi (771)
- The Estimation Algorithm of Eye Diagram Cross-point for Vector Network Analyzer GAO Qiang, MA Shi-min, LIU Jie (777)
- Study on the Influencing Factors and Long-term Stability of the CT Number of Siemens Large Aperture CT Simulator HU Jin-you, ZOU Lian, XIE Zhao, LUO Ke-lin, YIN Yun-peng, ZHANG Wei-sha (783)
- The International Key Comparison in Mammography X-rays Air-kerma WANG Ji, WU Jin-jie, GUO Si-ming, LIU Ying, WANG Pei-wei (790)
- Small Field Output Factor Measurement and Verification Based on TRS-483 ZHANG Xi, WANG Zhi-peng, WANG Kun, HUANG Ji, QI Ya-ping, LIU Fu-bin, JIN Sun-jun (796)
- Prediction of CO₂ Physical Properties in Near-Critical Region Based on WOA-LSSVM Model HE San, TANG Kai, ZHANG Mao-chao, XUE Ya-wen, XUE Shi-qi (803)
- The Application of Standard Gas Mixture of SO₂ and NO in Ecological Environment Monitoring Inter-laboratory Comparison WU Xiao-feng, WANG De-fa, WU hai, LÜ Yi-bing (810)
- Applications of RNA Spike-in Quality Control for RNA Sequencing ZHANG Yu, WANG Xia, ZHANG Yong-zhuo, YANG Jia-yi, NIU Chun-yan, ZHAO Yang, DONG Lian-hua (818)
- The Establishment of Digital PCR Quantitative Method for Strain B.1.1.7 of SARS-CoV-2 WANG Xia, GUO Ruo-hui, DONG Lian-hua (826)
- A Further Short History of the SI Prefixes Richard J C Brown. Translation: Ren Si-yuan, Yu Lian-chao. Revision: Zhang Ai-min (833)

计量学报
ACTA METROLOGICA SINICA
月刊 Monthly

1980年1月创刊 Established in January, 1980
2023年5月第44卷第5期 May, 2023. Vol. 44, No. 5
总第224期 Serial No. 224 (2023年5月28日出版)

主管单位 国家市场监督管理总局
主办 中国计量测试学会
出版 计量学报编辑部
编 辑 计量学报编辑委员会
主编 崔丽红
通信处 北京1413信箱
(邮政编码 100029)
电话 (010)64271480
印刷 北京科信印刷有限公司
国内总发行 北京报刊发行局
国内订购处 全国各地邮局
国外总发行 中国国际图书贸易集团
有限公司(北京399信箱)

Administrated by: State Administration for Market Regulation
Sponsored by: Chinese Society for Measurement
Published by: Acta Metrologica Sinica Press
Edited by: Editorial Board of the Acta Metrologica Sinica
(P. O. Box 1413, Beijing 100029, China)
Editor in Chief: Cui Li-hong
Tel: (010)64271480
Email: jiliangxuebao@163.com
Home page: jlxb.china-csm.org
Printed by: Beijing Kexin Printing Co., Ltd.
Overseas Distributor: China International Book Trading
Corporation (P. O. Box 399, Beijing 100044, China)
Domestic Distributor: Beijing Baokan Faxingju
Subscription Office: All Local Post Offices in China

ISSN 1000-1158 国内邮发代号:2-798 国外邮发代号:BM232 国内定价:全年 1200.00 元 本期 100.00 元
CN 11-1864/TB