



ISSN 0254-3087
CN 11-2179/TH
CODEN YYXUDY

仪器仪表学报

YIQI YIBIAO XUEBAO

CHINESE JOURNAL OF SCIENTIFIC INSTRUMENT

2012(4)

第33卷 第4期
Vol.33 No.4

中国仪器仪表学会主办

CHINESE JOURNAL OF SCIENTIFIC INSTRUMENT

VOLUME 33 NUMBER 4 April 2012

CONTENTS

Generalized effective radiance temperature in radiation thermometry	Yuan Zundong (721)
Research on reconstruction method for unknown objects through incorporating SFS algorithm and active vision technology .....	..... He Bingwei, Chen Zhipeng, Lin Dongyi, Zhou Xiaolong (727)
Experimental study on critical back-pressure ratio of sonic nozzle at low Reynolds number .....	..... Hu Heming, Cui Lishui, Wang Chi, Meng Tao, Li Chunhui (737)
Reconstruction of compressed speech sensing based on overcomplete linear prediction dictionary	Sun Linhui, Yang Zhen, Ji Yunyun, Ye Lei (743)
Time delay estimation method of abnormal sound source localization in public places	Li Weihong, Tang Haibing, Gong Weiguo (750)
Internet time-delay prediction based on FARIMA model	Song Yang, Tu Xiaomin, Fei Minrui (757)
Study on three-dimensional imaging time-domain algorithm based on planar scanning mode	Hu Chufeng, Zhou Zhou, Li Nanjing, Zhang Limxi (764)
Research on MEMS gyroscope signal denoising based compressed sensing theory .....	..... Cheng Cheng, Pan Quan, Wang Shenlong, Cheng Yongmei (769)
Research on real-time de-noising of FOG based on second generation wavelet transform .....	..... Gao Wei, Zu Yue, Wang Wei, Lan Haiyu, Zhang Ya (774)
Semi-blind fetal electrocardiogram extraction by suppressing the cross-terms of the Wigner-Ville representations	Cai Kun (781)
Filtering algorithm for multi-microphones based on wavelet multi-scale information fusion	Lv Yanxin, Gu Xiaohui (788)
Element yield prediction in ladle furnace based on information fusion	Xu Zhe, Mao Zhizhong (795)
Active noise control system based on EMD and loudness	Nie Yonghong, Cheng Junsheng, Zhang Kang, Chen Jianguo (801)
Predicting recrudescence of atrial fibrillation based on recurrence complex network	Bai Baodan, Wang Yuanyuan, Yang Cuiwei (809)
Fault detection method based on relative-transformation partial least squares	Shi Huaitao, Liu Jianchang, Zhang Yu, Li Long (816)
New adaptive monitoring approach for a transmitter based on improved RPCA	Sun Jingjie, Zhao Jianjun, Yu Shicai, Yang Libin (823)
Three-dimensional finite element numerical simulation for time-domain electromagnetic casing inspection technology .....	..... Song Xijin, Guo Baolong, Wu Xianxiang, Dang Ruirong, Li Lipin (829)
Research on honeycomb sandwich composite structure damage detection based on matching pursuit method	Feng Yongming, Zhou Li, Li Zhen (836)
Study on embedded capacitive grating sensing technology and shaft power testing	Xie Rui, Ma Tiehua, Wu Yaoyan, Jin Hong (844)
Diagnosis and solution of the ill-posed problem in WSNs node localization	Wang Lei, Wang Xiaopeng (850)
Influence of inner magnetic field distribution on performance of magneto-elastic sensor for cable tension .....	..... Liu Xiaoliang, Chen Weimin, Zhang Peng, Liu Lin, Luo Wei (857)
Tree structured Bayesian network learning algorithm for scene classification	Wang Zhongfeng, Wang Zhihai, Xie Wenjie (863)
Phase and CGVF-based level set segmentation of breast ultrasound images	Gao Liang, Liu Xiaoyun, Chen Wufan (870)
Application of improved constant module blind equalization algorithm in medical CT image blind restoration .....	..... Sun Yunshan, Zhang Liyi, Zhang Jin, Duan Jizhong (878)
Analysis and realization of day-time ranging of SLR	Han Guangyu, Qu Feng, Guo Jin, Cao Lihua (885)
Study on flow rate measurement in pipeline transportation for concentrated ore slurry	He Cheng, Wang Yaonan, Zou Weisheng (891)
Study on single-channel magnetic induction tomography technique based on synchronous detection	Luo Haijun, He Wei, Xu Zheng, Li Bing (899)
Study on single-trial feature extraction method of single-channel visual evoked potential .....	..... Yan Bei, Liu Sha, Li Jianhua, Yuan Haiwen, Ding Fengfeng (905)
Error correction of magnetic field component gradiometer based on FLANN and least-squares	Huang Yu, Hao Yanling (911)
Thermal analysis for the specific force system of strapdown gravimeter for airborne survey	Li Jilian, Zhang Kaidong, Zhang Qi (918)
Comparison of two water-fraction calculation models in oil-water two-phase flow	Li Lipin, Dang Ruirong, Huang Yanqun, Gao Guowang (924)
Resolution method of laser ranging ambiguity based on overdetermined equation system .....	..... Le Yi, Xu Xianze, Li Zhongbing, Zhao Yu, Xu Fengqiu (930)
Quadrature drift control of hemispherical resonator gyro under force-to-rebalance mode .....	..... Wang Xu, Wu Wenci, Fang Zhen, Luo Bing, Li Yun (936)
Research on feature selection method based on five classes of palmprint principal lines on the whole palm	Yuan Weiqi, Gu Zonghui (942)
Backstepping dynamic surface control for high-order nonlinear hydraulic roll gap system .....	..... Wu Zhongqiang, Xia Qing, Peng Yan, Sun Jianliang (949)
Distributed multiple attribute-based energy-balance routing for wireless sensor networks .....	..... Wang Kai, Deng Zhongfen, Shi Weiren, Wang Xiaogang (955)

仪器仪表学报
YIQI YIBIAO XUEBAO
第33卷 第4期 2012年4月

目 次

学术论文

辐射测温的广义有效亮度温度	原遵东(721)
融合 SFS 和主动视觉技术的未知物体重建方法	何炳蔚 陈志鹏 林东艺 周小龙(727)
低雷诺数音速喷嘴临界背压比的实验研究	胡鹤鸣 崔骊水 王池 孟涛 李春辉(737)
基于过完备线性预测字典的压缩感知语音重构	孙林慧 杨震 季云云 叶蕾(743)
公共场所异常声源定位中时延估计方法研究	李伟红 汤海兵 龚卫国(750)
基于 FARIMA 模型的 Internet 时延预测	宋杨 涂小敏 费敏锐(757)
一种时域平面扫描三维成像算法研究	胡楚锋 周洲 李南京 张麟兮(764)
基于压缩感知理论的 MEMS 陀螺仪信号降噪研究	程承潘 泉 王申龙 程咏梅(769)
基于二代小波的光纤陀螺实时降噪方法研究	高伟祖 悅王伟 兰海钰 张亚(774)
抑制 Winger 分布交叉项的胎心电半盲分离方法	蔡坤(781)
多传声器小波尺度信息融合滤波算法	吕艳新 顾晓辉(788)
基于信息融合的钢包精炼炉元素收得率预报	徐喆 毛志忠(795)
基于 EMD 与响度的有源噪声控制系统	聂永红 程军圣 张亢 陈建国(801)
基于递归复杂网络的房颤术后监测	白宝丹 汪源源 杨翠微(809)
基于相对变换 PLS 的故障检测方法	石怀涛 刘建昌 张羽 李龙(816)
基于改进 RPCA 的某型发射机自适应监测新方法	孙靖杰 赵建军 于仕财 杨利斌(823)
时域电磁法套管探伤技术三维有限元数值模拟	宋汐瑾 郭宝龙 吴宪祥 党瑞荣 李利品(829)
基于匹配追踪的蜂窝夹层复合材料损伤检测	冯勇明 周丽 李真(836)
嵌入式容栅传感技术及轴功率测试研究	谢锐 马铁华 武耀艳 靳鸿(844)
WSNs 节点定位不稳定性诊断与克服	王雷 王晓鹏(850)
传感器内部磁场分布对磁弹索力传感器性能的影响	刘小亮 陈伟民 章鹏 刘琳 罗伟(857)
基于树型贝叶斯网络的场景分类引擎训练算法	王中锋 王志海 解文杰(863)
基于相位和 GGVF 的水平集乳腺超声图像分割	高梁 刘晓云 陈武凡(870)
改进恒模盲均衡在医学 CT 图像盲恢复中的应用	孙云山 张立毅 张锦 段继忠(878)
卫星激光测距中白天测距的分析与实现	韩光宇 瞿锋 郭劲 曹立华(885)
精矿浆体管道输送流量检测研究	何成 王耀南 邹伟生(891)
基于同步检波的单通道磁感应成像技术研究	罗海军 何为 徐征 李冰(899)
单通道视觉诱发脑电的单次提取方法研究	闫蓓 刘莎 李建华 袁海文 丁锋峰(905)
基于 FLANN 和最小二乘的磁梯度计误差校正	黄玉 郝燕玲(911)
捷联式航空重力仪比力系统热分析研究	李纪莲 张开东 张玘(918)
油水两相流中 2 种含水率计算模型比较	李利品 党瑞荣 黄燕群 高国旺(924)
基于超定方程组的相位激光测距解模糊算法	乐意 许贤泽 李忠兵 赵宇 徐逢秋(930)
力平衡模式下半球谐振陀螺正交误差控制	王旭 吴文启 方针 罗兵 李云(936)
全手掌纹 5 类主线特征选择方法研究	苑玮琦 谷宗辉(942)
高阶非线性液压辊缝系统的 Backstepping 动态面控制	吴忠强 夏青 彭艳 孙建亮(949)
基于多属性决策的 WSNs 分布式能量均衡路由	王楷 邓仲芬 石为人 王小刚(955)