

仪器仪表学报

YIQI YIBIAO XUEBAO

第 31 卷 第 8 期 2010 年 8 月

目 次

学 术 论 文

基于皮萨伦科谱分解法的转台信号失真研究·····	李绪友	张 娜(1681)
消化道微诊疗装置的定位微粒群算法研究·····	郭旭东	严荣国(1687)
基于噪声白化准则的自适应噪声抵消方法·····	文 静	文玉梅 李 平(1693)
单频载波相位的周跳探测与修复算法研究·····	滕云龙	师奕兵 郑 植(1700)
基于内禀模态能量比呼吸信号特征参数提取方法·····	张淑清 上官寒露	袁计委 赵玉春 杨 瑾(1706)
基于数据融合的三段式心音身份识别技术·····	成谢锋 马 勇	张少白 张 瑛 郭宇锋(1712)
基于改进粒子滤波算法的人眼跟踪方法·····	郭君斌	郭晓松 雷 磊 薛 冰(1720)
可控程磁场发生器与行为记录集成微系统·····	刘小峰	郭 峰 杨宪强(1726)
一种分段在线支持向量回归算法·····	刘大同 彭 宇	彭喜元 于 江 陈 强(1732)
基于 SVM 和证据理论的多数据融合故障诊断方法·····		姜万录 吴胜强(1738)
遗传优化三值神经网络多故障测试生成算法·····	吴丽华	王旭东 史芳芳 杨洁琼(1744)
往复式摩擦磨损试验机及其计算机控制系统设计·····	刘永平	龚 俊 辛 舟 侯运丰(1750)
粒子群优化算法在改善传感器稳定性中的应用·····	李玉军	汤晓君 刘君华(1756)
一种机械零件表面加工工艺的自动识别方法研究·····	张佳阳	张志胜 史金飞 张 徐(1763)
基于 Gabor 小波的浮选泡沫图像纹理特征提取·····	刘金平	桂卫华 牟学民 唐朝晖 李建奇(1769)
基于透射图像纹理的纸币快速鉴别方法·····	谢剑斌	秦陈刚 陈章永 程永茂 刘 通(1776)
基于物理模型的彩色图像边缘检测与分类·····		耿 鑫 肖 瑾 胡晓光(1782)
基于统计分析 Boosting 的复杂场景目标识别方法研究·····	张 骏	高 隼 谢 昭 吴良海(1788)
基于时栅传感器的精密数控线切割机研发·····	彭东林	郑 永 杨继森 万文略 陈锡侯(1796)
并联混合动力台架测试系统设计与应用·····	叶 晓	金振华 刘 彪 卢青春(1802)
基于 EALCD 的数字散斑照相术面内位移测量·····		张鹏飞 郭 俊 王文生(1808)
基于阈值的调焦方向判断方法·····	王代华	周 锋 吴朝明(1813)
基于形状特征的移动目标实时分类研究·····	侯北平	朱 文 马连伟 介 婧(1819)
电厂烟气含氧量的智能混合预测方法·····		湛腾西 郭观七(1826)
基于双树复数小波和 SVR 的红外小目标检测·····	吴一全	尹丹艳 纪守新(1834)
利用双差压式节流装置测量湿气·····	徐 英	张 强 于 磊 段玉晗 李 涛(1840)
系统偏差情况下的目标跟踪技术·····		崔亚奇 宋 强 何 友(1848)
水声探测系统的目标噪声场建模与半实物仿真研究·····		陈立纲 苑秉成(1855)
三坐标测量机动态误差混合建模方法·····	杨洪涛	刘 勇 费业泰 陈晓怀(1861)
OVERHAUSER 磁力仪激发接收系统设计·····	谭 超	董浩斌 葛自强(1867)
基于合作目标的姿态测量系统建模及精度的蒙特卡罗估计·····	赵玉华	袁 峰 丁振良 李 晶(1873)
基于 LED 的生物延迟发光检测系统·····		张晓辉 余宁梅 刘 锴(1878)
宽带多普勒计程仪速度解模糊方法研究·····		黄雄飞 苑秉成 林 伟(1885)
数字闭环光纤电流互感器动态特性仿真与测试·····	王立辉	杨志新 殷明慧 陆于平(1890)
基于差分进化的多目标异构传感器网络节点部署机制·····		李 明 石为人(1896)
基于虚拟设备的车载异构网络互联模型·····	曲良东	刘衍珩 余雪岗 高振博(1904)

研究通讯

基于线结构光的四通道舵偏角同步动态测量系统·····	张广军	刘 震 魏振忠 雷 虹 江 洁(1910)
未知环境下移动机器人自主感知斜坡地形方法·····	朱 江	王耀南 余洪山 王文格 许海霞(1916)

CHINESE JOURNAL OF SCIENTIFIC INSTRUMENT

VOLUME 31 NUMBER 8 August 2010

CONTENTS

Study of turntable signal distortion based on Pisarenko spectrum decomposition	Li Xuyou, Zhang Na(1681)
Research on particle swarm optimization for localizing medical micro-device in alimentary tract	Guo Xudong, Yan Rongguo(1687)
Adaptive noise cancellation method based on error whitening criterion	Wen Jing, Wen Yumei, Li Ping(1693)
Algorithm of cycle-slip detection and correction in single-frequency carrier phase	Teng Yunlong, Shi Yibing, Zheng Zhi(1700)
Study on the extraction method of characteristic parameters of respiration signals based on intrinsic mode energy ratio	 Zhang Shuqing, Shangguan Hanlu, Yuan Jiwei, Zhao Yuchun, Yang Jin(1706)
Three-step identity recognition technology using heart sound based on information fusion	 Cheng Xiefeng, Ma Yong, Zhang Shaobai, Zhang Ying, Guo Yufeng(1712)
Eye tracking method based on improved particle filtering algorithm	Guo Junbin, Guo Xiaosong, Lei Lei, Xue Bing(1720)
Miniature system integrated with micro-GPS and magnetic field generator for avian magnetic navigation research	 Liu Xiaofeng, Guo Feng, Yang Xianqiang(1726)
Segmental online support vector regression algorithm	Liu Datong, Peng Yu, Peng Xiyuan, Yu Jiang, Chen Qiang(1732)
Multi-data fusion fault diagnosis method based on SVM and evidence theory	Jiang Wanlu, Wu Shengqiang(1738)
Three-valued neural network test generation algorithm for multi-faults based on genetic optimization	 Wu Lihua, Wang Xudong, Shi Fangfang, Yang Jieqiong(1744)
Design of reciprocating friction and wear testing machine and its computer control system	 Liu Yongping, Gong Jun, Xin Zhou, Hou Yunfeng(1750)
Application of particle swarm optimization algorithm in improving the stability of sensor	Li Yujun, Tang Xiaojun, Liu Junhua(1756)
Research on automatic identification of mechanical part surface processing technology	 Zhang Jiayang, Zhang Zhisheng, Shi Jinfei, Zhang Xu(1763)
Flotation froth image texture feature extraction based on Cabor wavelets	 Liu Jinping, Gui Weihua, Mu Xuemin, Tang Zhaohui, Li Jianqi(1769)
Rapid algorithm to identify the authenticity of banknotes based on transmission image texture	 Xie Jianbin, Qin Chengang, Chen Zhangyong, Cheng Yongmao, Liu Tong(1776)
Color image edge detection and classification based on physical model	Geng Xin, Xiao Jin, Hu Xiaoguang(1782)
Object recognition in complex scenes based on statistical Boosting	Zhang Jun, Gao Jun, Xie Zhao, Wu Lianghai(1788)
Design of precise CNC wire-cutting machines based on time-grating sensors	 Peng Donglin, Zheng Yong, Yang Jisen, Wan Wenlve, Chen Xihou(1796)
Design and application of parallel hybrid power system testbed platform	Ye Xiao, Jin Zhenhua, Liu Biao, Lu Qingchun(1802)
In-plane displacement measurement of digital speckle photography based on EALCD	Zhang Pengfei, Guo Jun, Wang Wensheng(1808)
Direction judgment method for autofocus based on threshold	Wang Daihua, Zhou Feng, Wu Zhaoming(1813)
Moving target classification based on shape features from real-time video	Hou Beiping, Zhu Wen, Ma Lianwei, Jie Jing(1819)
Intelligent hybrid prediction method of the flue gas oxygen content in power plant	Zhan Tengxi, Guo Guanqi(1826)
Detection of small infrared target based on dual-tree complex wavelet transform and SVR	Wu Yiquan, Yin Danyan, Ji Shouxin(1834)
Wet gas metering using double differential pressure device	Xu Ying, Zhang Qiang, Yu Lei, Duan Yuhan, Li Tao(1840)
Direct tracking technique when systematic error exists	Cui Yaqi, Song Qiang, He You(1848)
Study on modeling of target sound field and hardware-in-the-loop simulation in underwater acoustic detection system	 Chen Ligang, Yuan Bingcheng(1855)
Hybrid modeling method for CMM dynamic error	Yang Hongtao, Liu Yong, Fei Yetai, Chen Xiaohuai(1861)
OVERHAUSER magnetometer excitation and receiving system design	Tan Chao, Dong Haobin, Ge Zhiqiang(1867)
Modeling of the attitude measurement system based on cooperation target and its accuracy estimation with Monte-Carlo stimulation	 Zhao Yuhua, Yuan Feng, Ding Zhenliang, Li Jing(1873)
Measurement system for delayed luminescence based on the LED	Zhang Xiaohui, Yu Ningmei, Liu Kai(1878)
Solution to velocity ambiguity of broadband Doppler velocity log	Huang Xiongfei, Yuan Bingcheng, Lin Wei(1885)
Simulation and test of dynamic performances of digital closed-loop fiber optic current transducer	 Wang Lihui, Yang Zhixin, Yin Minghui, Lu Yuping(1890)
Optimal multi-objective sensor deployment scheme based on differential evolution algorithm in heterogeneous sensor networks	 Li Ming, Shi Weiren(1896)
In-vehicle heterogeneous network interconnection model based on virtual devices	 Qu Liangdong, Liu Yanheng, Yu Xuegang, Gao Zhenbo(1904)
Four-channel synchronous dynamic measurement system for rudder angles based on line structured light	 Zhang Guangjun, Liu Zhen, Wei Zhenzhong, Lei Hong, Jiang Jie(1910)
Mobile robot autonomous perceiving slope terrain under unknown environment	 Zhu Jiang, Wang Yaonan, Yu Hongshan, Wang Wenge, Xu Haixia(1916)