

# 光电工程

第38卷第2期  
2011年2月

Guangdian Gongcheng  
(月刊)

总第255期  
1974年创刊

## 目 次

### •微光学•

- 近场光镊与AFM探针复合的光阱力分析.....刘炳辉, 杨立军, 王扬, 袁巨龙 (1)

### •目标识别与跟踪•

- 光电跟踪系统非线性新息自适应卡尔曼滤波算法.....王秋平, 左玲, 康顺 (9)

- 基于视频算法的鱼类运动跟踪研究.....程淑红, 蔡菁, 胡春海 (14)

- 基于贝叶斯推理时空交互式多视角目标跟踪.....范晶晶, 胡波, 冯巍 (19)

### •光电测量•

- 闪电信号的探测分析及其模糊识别研究.....项震, 刘明, 李鹏, 郑毅, 范江兵 (28)

- 无衍射光电子标靶及误差分析.....陈慧, 赵斌 (34)

- 溶质维尔德常数分离检测及其应用研究.....沈骁, 梁忠诚 (41)

### •传感技术•

- 基于弛豫铁电单晶的热释电焦平面研究.....邵秀梅, 马学亮, 于月华, 方家熊 (46)

### •信息光学•

- 基于视觉感知的图像自适应半脆弱水印算法.....杨恒伏, 孙光 (51)

### •图像与信号处理•

- 基于GA-BP算法噪声检测的椒盐噪声滤波算法.....宋寅卯, 李晓娟 (59)

- 基于SIFT的自动匹配策略.....曾峦, 翟优, 谭久彬 (65)

- 基于亮度的自适应单尺度Retinex图像增强算法.....刘高平, 赵萌 (71)

- 基于均衡化概率模型的特征匹配及其应用.....陈莹, 艾春璐 (78)

- 基于无参考结构清晰度的自适应自动对焦方法.....谢小甫, 周进, 吴钦章 (84)

### •模式识别•

- 手指静脉认证系统的算法研究.....林春清, 周宇健, 陈庆武 (90)

- 基于线性基函数模型的虹膜定位.....王凯, 钱云涛 (97)

- 基于最大间距MFA的鉴别分析.....王勇, 卢桂馥 (102)

### •遥感技术•

- 商空间理论下面向对象的遥感影像分类.....李刚, 万幼川 (108)

- 高分辨率遥感图像感兴趣目标的提取算法.....周伟, 关键, 张国华 (115)

- 基于SIFT特征点的无人机影像拼接方法研究.....何敬, 李永树, 鲁恒, 任志明 (122)

### •显示技术•

- 一种OLED显示参数温度自适应设计.....张雷, 吴华夏, 胡俊涛, 傅勇, 吕国强 (127)

### •光电器件与系统•

- 功率型LED瞬态温度场及热应力分布的研究.....朱旭平, 余桂英, 丁纾妹, 胡书红 (132)

- 一种新型矩阵编码器的研究.....耿立明, 曹国华, 王雯雯, 尚春民 (138)

- 一种实用型大气透射式能见度仪的研制.....程绍荣, 魏全忠, 吕军 (144)

# Opto-Electronic Engineering

Vol.38, No.2

Feb, 2011

(Monthly)

Total No. 255

1974—2011

## Contents

### • Micro-optics •

- Analysis of Trapping Forces Combining Near-field Optical Tweezers with AFM Probe.....*LIU Bing-hui, YANG Li-jun, WANG Yang, YUAN Ju-long* (1)

### • Target Recognition and Tracking •

- Nonlinear Innovation Adaptive Kalman Filter Algorithm for Electro-optical Tracking.....*WANG Qiu-ping, ZUO Ling, KANG Shun* (9)

- Fish Motion Tracking Research Based on Video Algorithm.....*CHENG Shu-hong, CAI Jing, HU Chun-hai* (14)

- Spatiotemporal Interactive Multi-camera Object Tracking with Bayesian Inference.....*FAN Jing-jing, HU Bo, FENG Wei* (19)

### • Opto-electronic Measurement •

- Detection Analysis and Fuzzy Recognition Investigation for Lightning Signal.....*XIANG Zhen, LIU Ming, LI Peng, ZHENG Yi, FAN Jiang-bing* (28)

- Electric Target Based on Non-diffracting Beam and Error Analysis .....*CHEN Hui, ZHAO Bin* (34)

- Technology of Detecting Verdet Constant of Solute Separately and Its Applications.....*SHEN Xiao, LIANG Zhong-cheng* (41)

### • Sensing Technologies •

- Pyroelectric Arrays with Relax-based Ferroelectric Single Crystals.....*SHAO Xiu-mei, MA Xue-liang, YU Yue-hua, FANG Jia-xiong* (46)

### • Information Optics •

- An Image Adaptive Semi-fragile Watermarking Algorithm Based on Visual Perception.....*YANG Heng-fu, SUN Guang* (51)

### • Image and Signal Processing •

- Salt and Pepper Noise Filter Based on GA-BP Algorithm Noise Detector.....*SONG Yin-mao, LI Xiao-juan* (59)

- Automatic Matching Strategy Based on SIFT.....*ZENG Luan, ZHAI You, TAN Jiu-bin* (65)

- An Adaptive Single Scale Retinex Scheme for Image Enhancement Based on Luminance.....*LIU Gao-ping, ZHAO Meng* (71)

- Feature Matching Based on Balanced Probabilistic Model and Its Application.....*CHEN Ying, AI Chun-lu* (78)

- An Adaptive Autofocus Method Using No-reference Structural Sharpness.....*XIE Xiao-fu, ZHOU Jin, WU Qin-zhang* (84)

### • Pattern Recognition •

- Algorithm Research of Finger Vein Authentication.....*LIN Chun-yi, ZHOU Yu-jian, CHEN Qing-wu* (90)

- Iris Segmentation Based upon Linear Basis Function Model.....*WANG Kai, QIAN Yun-tao* (97)

- Discriminant Analysis Based on Maximum Margin Marginal Fisher.....*WANG Yong, LU Gui-fu* (102)

### • Remote Sensing Technologies •

- Object-oriented Classification Method Based on Quotient Space Theory.....*LI Gang, WAN You-chuan* (108)

- A Extracting Scheme for Targets of Interest in High Resolution Remote Sensing Imagery.....*ZHOU Wei, GUAN Jian, ZHANG Guo-hua* (115)

- Research of UAV Aerial Image Mosaic Based on SIFT.....*HE Jing, LI Yong-shu, LU Heng, REN Zhi-ming* (122)

### • Display Technologies •

- Design for Display Parameters of OLED Adaptive with Temperature.....*ZHANG Lei, WU Hua-xia, HU Jun-tao, FU Yong, LUO Guo-qiang* (127)

### • Opto-electronic Device and System •

- Transient Temperature Field and Thermal Stress of High Power LED.....*ZHU Xu-ping, YU Gui-ying, DING Shu-shu, HU Shu-hong* (132)

- The Study of a New-style Matrix Encoder.....*GENG Li-ming, CAO Guo-hua, WANG Wen-wen, SHANG Chun-min* (138)

- The Development of a New Atmosphere Transmittance Meter.....*CHENG Shao-rong, WEI Quan-zhong, LU Jun* (144)