

LOP | Laser & Optoelectronics Progress

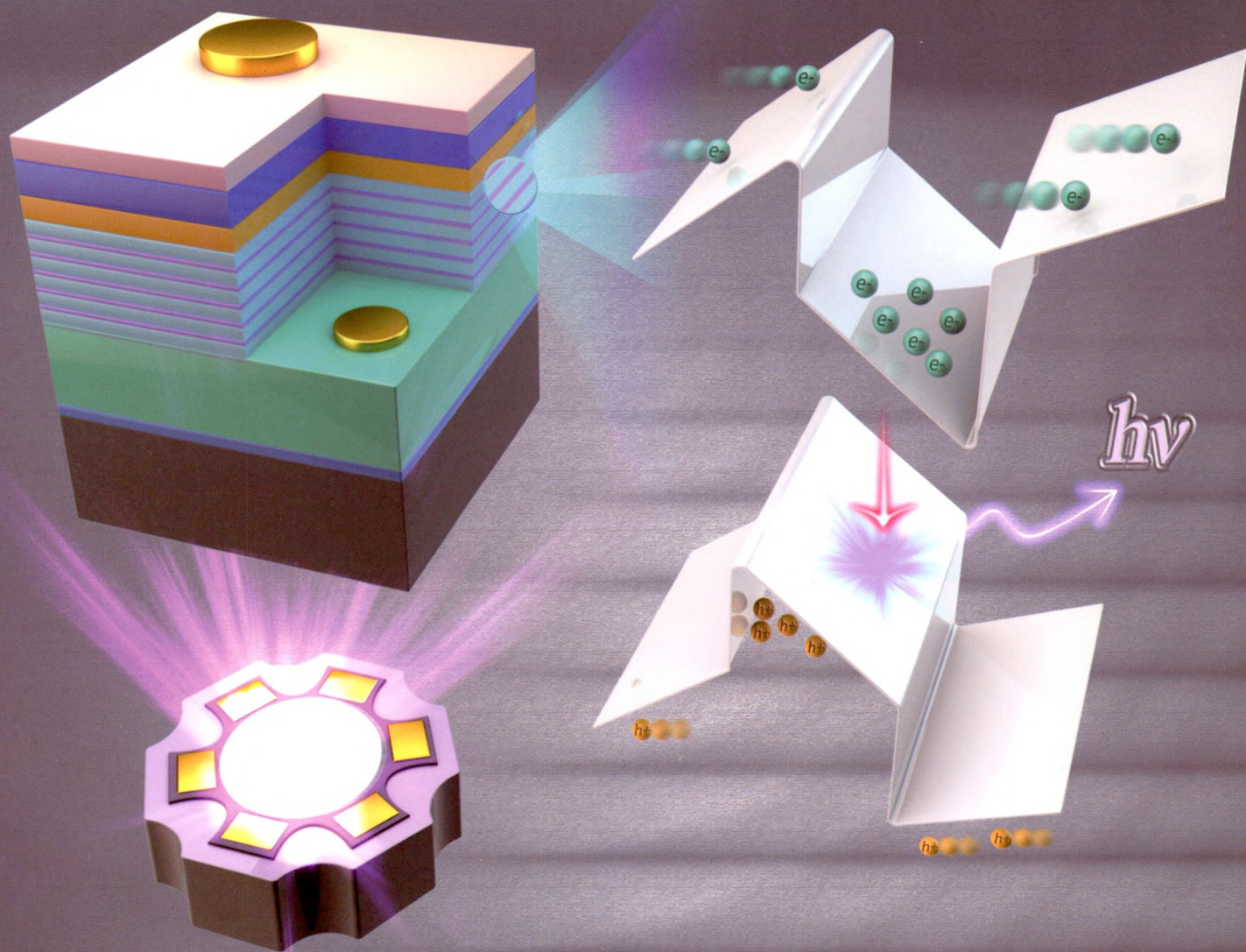
激光与光电子学进展

总第641期

第56卷 | 第6期

Vol. 56 | No. 6

2019.3(下)



ISSN 1006-4125



9 771006 412197

万方数据

中国科学院上海光学精密机械研究所 主办

激光与光电子学进展

第 56 卷 第 6 期 2019 年 3 月

(总第 641 期)

目 次

• 综述 •

AlGaIn 基深紫外发光二极管空穴注入效率的提高途径(封面文章,特邀综述) 田康凯, 楚春双, 毕文刚, 等 060001

光纤通信中的克尔非线性补偿技术 谢连妮, 曹蕾, 张璐, 等 060002

分布布拉格反射器半导体激光器的研究进展 范杰, 樊春阳, 杨晶晶, 等 060003

无线激光与射频互补通信系统的关键技术 丁良, 吴志勇, 谷雨聪, 等 060004

激光表面处理技术在石油机械中的应用 黄俊媛, 沈泽俊, 张立新, 等 060005

• 大气光学与海洋光学 •

弱湍流条件下无人机逆向调制激光通信系统的链路性能 陈阳, 赵尚弘, 赵静, 等 060101

• 探测器 •

基于统计特征和桥梁方法的红外弱小目标检测算法 韩志华, 刘晶红, 徐芳 060401

• 光纤光学与光通信 •

双向抽运拉曼放大器在 100 Gbit·s⁻¹ 超长距传输系统中的应用 迟荣华, 袁洲, 王飞, 等 060601

一种测距辅助的室内可见光指纹定位方法 陈道钱, 吴晓平, 华宇婷 060603

多纤芯弹性光网络中选路和纤芯分配模型及算法 胡艳, 校松, 冯晶晶 060604

• 图像处理 •

复杂背景下基于图像处理的桥梁裂缝检测算法 李良福, 孙瑞贤 061002

基于帧特征及维特比解码的手写体与印刷体分类 林琴, 夏俊峰, 涂铮铮, 等 061003

基于图像质量和注意力的宫腔镜视频关键帧提取 苗强强 061004

基于 U-Net 卷积神经网络的纳米颗粒分割 张芳, 吴玥, 肖志涛, 等 061005

基于多维局部二值模式和 XGBoost 的轻量谱线删除法 吴天龙, 李锴, 关欣 061006

基于深度学习航拍图像检测的梯度聚类算法 解博, 朱斌, 张宏伟, 等 061007

• 成像系统 •

基于深度学习和人眼视觉系统的遥感图像质量评价 刘迪, 李迎春 061101

• 集成光学 •

基于时域有限差分法的石墨烯纳米带阵列多频滤波特性研究 阳胜, 曾春平, 肖驰, 等 061301

• 激光器与激光光学 •

基于 Nd:YAG/Cr:YAG 复合晶体结构的被动调 Q 固体微片激光器 高旭恒, 吴立志 061401

• 机器视觉 •

一种基于视觉即时定位与地图构建的改进增强现实注册方法 郑国强, 周治平 061501

基于高动态范围图像的亮度测量方法 田会娟, 郝甜甜, 张辉, 等 061502

• 光计算 •

基于莫尔测量技术的光栅常数测定方法 程伟昊, 陈云云, 段传森, 等 062001

• 表面光学 •

化学抛光对硅基异质结太阳能电池性能的影响 姜元建, 张晓丹, 赵颖 062402

• 物理光学 •

基于量子点荧光猝灭法的蛋白质检测芯片 彭媛, 白忠臣, 张莹, 等 062601

• 遥感与传感器 •

激光扫描数据的密集噪声剔除方法 陈世超, 戴华阳, 王成, 等 062801

基于动态阈值的机载 LiDAR 点云滤波法 惠振阳, 鲁铁定, 胡友健, 等 062802

一种点云特征线提取方法 任前程 062803

偏联系数聚类和随机森林算法在雷达信号分选中的应用 张萌萌, 刘以安, 宋萍 062804

• 光谱学 •

基于快速稳健特征最大子矩阵的光谱图像配准方法 刘加林, 王慧琴, 王可, 等 063002

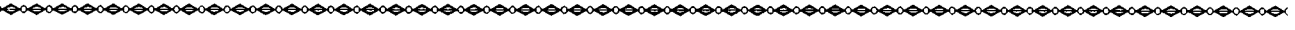
• 超快光学 •

n 型与半绝缘 6H-SiC 晶体的超快载流子动力学 聂媛, 王友云, 吴雪琴, 等 063201

• X 射线光学 •

基于 QAM 的 X 射线通信系统性能改善方法 王润, 薛凤凤, 薛阳, 等 063401

图像增强在文物 X 光图像中的应用 相建凯, 吴萌, 王展, 等 063402



本刊电子版彩色效果请详见中国光学期刊网 www.opticsjournal.net

Laser & Optoelectronics Progress

Vol.56, No.6 (Series No.641) March 2019

CONTENTS

• Reviews •

Hole Injection Efficiency Improvement for AlGaIn-Based Deep Ultraviolet Light-Emitting Diodes(Cover Paper, Invited Review)	 Tian Kangkai, Chu Chunshuang, Bi Wengang, et al. 060001
Techniques for Kerr Nonlinearity Compensation in Fiber Communication Systems	 Xie Lianni, Cao Lei, Zhang Lu, et al. 060002
Research Progress of Distributed Bragg Reflector Semiconductor Lasers	 Fan Jie, Gong Chunyang, Yang Jingjing, et al. 060003
Key Technologies of Wireless Laser and Radio Frequency Complementary Communication System	 Ding Liang, Wu Zhiyong, Gu Yucong, et al. 060004
Applications of Laser Surface Treatment Technologies in Petroleum Machinery	 Huang Junyuan, Shen Zejun, Zhang Lixin, et al. 060005

• Atmospheric Optics and Oceanic Optics •

Link Performance of Unmanned Aerial Vehicle Retro-Modulating Optical Communication System Under Weak Turbulence Condition	 Chen Yang, Zhao Shanghong, Zhao Jing, et al. 060101
---	---

• Detectors •

Infrared Dim Target Detection Based on Statistical Characteristics and Bridge Method	 Han Zhihua, Liu Jinghong, Xu Fang 060401
--	--

• Fiber Optics and Optical Communications •

Application of Bi-Directionally Pumped Raman Amplifier in 100 Gbit·s ⁻¹ Ultra-Long Distance Transmission System	 Chi Ronghua, Yuan Yuan, Wang Fei, et al. 060601
Indoor Visible Light Fingerprint Localization Scheme with Range-Assistance	 Chen Daoqian, Wu Xiaoping, Hua Yuting 060603
Model and Algorithm for Routing and Fiber-Core Assignment in Multi-Core Elastic Optical Networks	 Hu Yan, Xiao Song, Feng Jingjing 060604

• Image Processing •

Bridge Crack Detection Algorithm Based on Image Processing Under Complex Background	 Li Liangfu, Sun Ruiyun 061002
Discrimination of Handwritten and Printed Texts Based on Frame Features and Viterbi Decoder	 Lin Qin, Xia Junfeng, Tu Zhengzheng, et al. 061003
Key Frame Extraction of Hysteroscopy Videos Based on Image Quality and Attention	 Miao Qiangqiang 061004
Nanoparticle Segmentation Based on U-Net Convolutional Neural Network	 Zhang Fang, Wu Yue, Xiao Zhitao, et al. 061005
Lightweight Staff Removal Method Based on Multidimensional Local Binary Pattern and XGBoost	 Wu Tianlong, Li Qiang, Guan Xin 061006
Gradient Clustering Algorithm Based on Deep Learning Aerial Image Detection	 Xie Bo, Zhu Bin, Zhang Hongwei, et al. 061007

·Imaging Systems·

Quality Assessment of Remote Sensing Images Based on Deep Learning and Human Visual System

..... Liu Di, Li Yingchun 061101

·Integrated Optics·

Multi-Frequency Filtering Characteristics of Graphene-Nanoribbon Arrays Based on Finite Difference Time Domain Method

..... Yang Sheng, Zeng Chunping, Xiao Chi, et al. 061301

·Lasers and Laser Optics·

Passively Q-Switched Solid State Monolithic Laser Based on Composite Nd:YAG /Cr:YAG Crystal

..... Gao Xuheng, Wu Lizhi 061401

·Machine Vision·

Improved Augmented Reality Registration Method Based on VSLAM Zheng Guoqiang, Zhou Zhiping 061501

Luminance Measurement Based on High Dynamic Range Images

..... Tian Huijuan, Hao Tiantian, Zhang Hui, et al. 061502

·Optics in Computing·

Method of Measuring Grating Constant Based on Moiré Measurement Technology

..... Cheng Weihao, Chen Yunyun, Duan Chuansen, et al. 062001

·Optics at Surfaces·

Influence of Chemical Polishing on Performances of Silicon Heterojunction Solar Cells

..... Jiang Yuanjian, Zhang Xiaodan, Zhao Ying 062402

·Physical Optics·

Protein Detection Chip Based on Quantum Dot Fluorescence Quenching Method

..... Peng Man, Bai Zhongchen, Zhang Ying, et al. 062601

·Remote Sensing and Sensors·

Method for Filtering Dense Noise from Laser Scanning Data

..... Chen Shichao, Dai Huayang, Wang Cheng, et al. 062801

Airborne LiDAR Point Cloud Filtering Algorithm Based on Dynamic Threshold

..... Hui Zhenyang, Lu Tieding, Hu Youjian, et al. 062802

Method for Extraction of Point Cloud Feature Line Ren Qiancheng 062803

Applications of Partial Connection Clustering Algorithm and Random Forest Algorithm in Radar Signal Sorting

..... Zhang Mengmeng, Liu Yi'an, Song Ping 062804

·Spectroscopy·

Spectral Image Registration Method Based on SURF Maximum Submatrix

..... Liu Jialin, Wang Huiqin, Wang Ke, et al. 063002

·Ultrafast Optics·

Ultrafast Carrier Dynamics in n-Type and Semi-Insulating 6H-SiC Crystals

..... Nie Yao, Wang Youyun, Wu Xueqin, et al. 063201

·X-Ray Optics·

Performance Improving Method of X-Ray Communication System Based on QAM

..... Wang Run, Xue Fengfeng, Xue Yang, et al. 063401

Application of Image Enhancement in X-Ray Photography of Cultural Relics

..... Xiang Jiankai, Wu Meng, Wang Zhan, et al. 063402

第十六届“中国光谷”国际光电子博览会 暨论坛 (OVC EXPO 2019)



PHOTOELECTRONICS

FUTURE AND ODAY

激光器与智能制造

光学与精密光学

光电前沿交叉应用

5G
光通信与5G技术

芯片与光电显示

2019年11月13-15日
武汉·中国光谷科技会展中心
www.ovcexpo.com.cn

万方数据