

LOP | Laser & Optoelectronics Progress

激光与光电子学进展

总第650期
第56卷 | 第15期
Vol. 56 | No. 15
2019.8(上)

uwFBG_n

uwFBG_{n+1}

ISSN 1006-4125



激光与光电子学进展

第 56 卷 第 15 期 2019 年 8 月

(总第 650 期)

目 次

· 综述 ·

全息体视图打印技术进展综述 蒋晓瑜, 樊帆, 闫兴鹏, 等 150002

基于深度学习的语义分割问题研究综述 张祥甫, 刘健, 石章松, 等 150003

· 光纤光学与光通信 ·

基于双相移光纤光栅的光电多频振荡生成及温度不敏感传感解调方法 许鸥, 符取珊 150601

基于斐索干涉的超弱光纤光栅水听器阵列实验研究 (封面文章) 徐倩楠, 周次明, 范典, 等 150602

光纤干涉次声传感器研制 李汉正, 吴高米, 马振钧, 等 150603

· 图像处理 ·

基于聚类式区域生成的全卷积目标检测网络 潘志浩, 陈莹 151001

基于区域蛙跳搜索与轮廓匹配的显微图像拼接 颜振翔, 王寒迎, 石齐双, 等 151002

光场图像透视变换算法 王建明, 毛一鸣, 晏涛, 等 151003

基于改进的引导滤波和双通道脉冲耦合神经网络的医学图像融合 王建, 吴锡生 151004

基于改进型 UL-PCNN 的绝缘子图像分割 杜小燕, 钟俊 151005

利用残差密集网络的高光谱图像分类 魏祥坡, 余旭初, 谭熊, 等 151006

双边滤波与引导滤波增强激光三维图像的方法 李媛森, 孙华燕, 郭惠超 151007

· 仪器, 测量与计量 ·

基于 MATLAB 与非球面轮廓仪的 Q-Type 非球面检测技术 贾孟, 薛常喜, 李闯, 等 151201

基于改进 Faster R-CNN 的子弹外观缺陷检测 马晓云, 朱丹, 金晨, 等 151202

虚拟结构光三维数据压缩算法的量化误差抑制 武迎春, 曹益平, 吉聪建, 等 151203

• 机器视觉 •

一种基于边缘约束迭代的非局部立体匹配算法	罗颖, 霍冠英, 许鑫鑫, 等 151501
基于深度残差网络与边缘监督学习的显著性检测	时斐斐, 张松龙, 彭力 151502
基于 Bi-LSTM-Attention 模型的人体行为识别算法	朱铭康, 卢先领 151503
基于同心圆标志的空间平面夹角测量	雷经发, 陈志强, 张森, 等 151504

• 医用光学与生物技术 •

肺癌细胞物质表达及堆积结构的拉曼位移特征	杨玉, 陶正荣, 闫静, 等 151701
----------------------------	-----------------------

• 光学设计与制造 •

全反式超短脉冲测量系统的光学设计	程广真, 张留洋, 浦绍质, 等 152201
基于折射率预补偿方法的扩展光源匀光照明二次光学设计	康学亮, 姚海兵, 刘启隆, 等 152202

• 光学器件 •

基于二维光子晶体的温控光衰减器	陈之厦, 梁斌明, 庄松林 152301
基于高迁移率透明导电氧化物的高速、低插入损耗硅基光波导移相器研究	聂立霞, 张燕, 鲜仕林, 等 152302

• 光电子学 •

基于非对称纳米颗粒阵列的垂直与平行表面晶格共振	侯浩杰, 刘钧妍, 肖博文, 等 152501
基于相位调制的光纤干涉型光学相控阵扫描特性研究	任远中, 柴金华 152502

• 量子光学 •

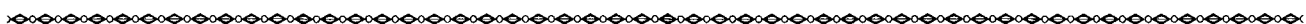
压缩真空态通过分束器的纠缠特性研究	魏天丽, 吴德伟, 李响, 等 152701
基于 CPU/GPU 异构平台的连续变量量子密钥分发多维数据协调	穆健健, 郭大波, 马识途, 等 152702

• 遥感与传感器 •

基于 DeepLab-v3+ 的遥感影像分类	袁立, 袁吉收, 张德政 152801
------------------------------	---------------------

• 光谱学 •

蘑菇孢子的表面增强拉曼光谱研究	安冉, 欧全宏, 刘刚, 等 153001
基于分数阶微分和连续投影算法-反向传播神经网络的小麦叶片含水量高光谱估算	吾木提·艾山江, 买买提·沙吾提, 马春玥 153002



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.15 (Series No.650) August 2019

CONTENTS

• Reviews •

Review of Development of Holographic Stereogram Printing Technology

..... Jiang Xiaoyu, Fan Fan, Yan Xingpeng, et al. 150002

Review of Deep Learning-Based Semantic Segmentation Zhang Xiangfu, Liu Jian, Shi Zhangsong, et al. 150003

• Fiber Optics and Optical Communications •

Temperature-Insensitive Method for Interrogating Fiber Grating Sensor Using Dual Phase-Shifted Fiber Grating and Optoelectronic Oscillator Xu Ou, Fu Xiashan 150601

Experimental Study on Ultra-Weak Fiber Bragg Grating Hydrophone Arrays Based on Fizeau Interference (Cover Paper)

..... Xu Qiannan, Zhou Ciming, Fan Dian, et al. 150602

Preparation of Fiber-Optic Interferometer Based Infrasonic Sensor

..... Li Hanzheng, Wu Gaomi, Ma Zhenjun, et al. 150603

• Image Processing •

Full-Convolution Object Detection Network Based on Clustering Region Generation Pan Zhihao, Chen Ying 151001

Microscopic Image Stitching Based on Regional Frog Leaping Search Algorithm and Image Contour

..... Yan Zhenxiang, Wang Hanying, Shi Qishuang, et al. 151002

Perspective Transformation Algorithm for Light Field Image

..... Wang Jianming, Mao Yiming, Yan Tao, et al. 151003

Medical Image Fusion Based on Improved Guided Filtering and Dual-Channel Pulse Coupled Neural Networks

..... Wang Jian, Wu Xisheng 151004

Insulator Image Segmentation Based on Improved Unit-Linking Pulse-Coupled Neural Network

..... Du Xiaoyan, Zhong Jun 151005

Hyperspectral Image Classification Based on Residual Dense Network

..... Wei Xiangpo, Yu Xuchu, Tan Xiong, et al. 151006

Image Preprocessing Method Based on Bilateral Filtering Combined with Guided Filtering to Enhance Laser Three-Dimensional Images Li Yuanmiao, Sun Huayan, Guo Huichao 151007

• Instrumentation, Measurement and Metrology •

Q-Type Asphere Testing Technology Based on MATLAB and Aspheric Profilometer

..... Jia Meng, Xue Changxi, Li Chuang, et al. 151201

Bullet Appearance Defect Detection Based on Improved Faster Region-Convolutional Neural Network

..... Ma Xiaoyun, Zhu Dan, Jin Chen, et al. 151202

Quantization Error Restraining of Virtual Structured-Light Three-Dimensional Data Compression Algorithm

..... Wu Yingchun, Cao Yiping, Ji Congjian, et al. 151203

• Machine Vision •

Non-Local Stereo Matching Algorithm Based on Edge Constraint Iteration

..... Luo Ying, Huo Guanying, Xu Jinxin, et al. 151501

Salient Object Detection Based on Deep Residual Networks and Edge Supervised Learning

..... Shi Feifei, Zhang Songlong, Peng Li 151502

Human Action Recognition Algorithm Based on Bi-LSTM-Attention Model Zhu Mingkang, Lu Xianling 151503

Measurement of Space Plane Angle Based on Concentric Circle Mark

..... Lei Jingfa, Chen Zhiqiang, Zhang Miao, et al. 151504

• Medical Optics and Biotechnology •

Raman Shift Characteristics of Substance Expression and Accumulation Structure in Lung Cancer Cells

..... Yang Yu, Tao Zhengrong, Yan Jing, et al. 151701

• Optical Design and Fabrication •

Optical Design of Total-Reflective Ultra-Short-Pulse Measurement System

..... Cheng Guangzhen, Zhang Liuyang, Pu Shaozhi, et al. 152201

Secondary Optical Design for Uniform Illumination of Extended Sources Based on Refractive Index Pre-Compensation Method

..... Kang Xueliang, Yao Haibing, Liu Qilong, et al. 152202

• Optical Devices •

Temperature-Controlled Optical Attenuator Based on Two-Dimensional Photonic Crystals

..... Chen Zhixia, Liang Binming, Zhuang Songlin 152301

High-Speed and Low-Insertion-Loss Silicon Waveguide Phase Shifter Based on High Mobility Transparent Conductive Oxides

..... Nie Lixia, Zhang Yan, Xian Shilin, et al. 152302

• Optoelectronics •

Formation of Orthogonal and Parallel Surface-Lattice Resonances with Asymmetric Nanoparticle Array

..... Hou Haojie, Liu Junyan, Xiao Bowen, et al. 152501

Scanning Characteristics of Fiber-Optic Interferometric Phased Array Based on Phase Modulation

..... Ren Yuanzhong, Chai Jinhua 152502

• Quantum Optics •

Entanglement Characteristics of Squeezed Vacuum State After Beam Splitter

..... Wei Tianli, Wu Dewei, Li Xiang, et al. 152701

Multidimensional Data Reconciliation for Continuous-Variable Quantum Key Distribution Based on CPU/GPU Heterogeneous Platform Mu Jianjian, Guo Dabo, Ma Shitu, et al. 152702

• Remote Sensing and Sensors •

Remote Sensing Image Classification Based on DeepLab-v3 + Yuan Li, Yuan Jishou, Zhang Dezheng 152801

• Spectroscopy •

Surface-Enhanced Raman Spectroscopy for Mushroom Spores An Ran, Ou Quanhong, Liu Gang, et al. 153001

Hyperspectral Estimation of Wheat Leaf Water Content Using Fractional Differentials and Successive Projection Algorithm-Back

Propagation Neural Network Umut Hasan, Mamat Sawut, Ma Chunyue 153002

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 TODAY

激光器与光智能制造

光学与精密光学

光通信与5G通信

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