



中国光学工程学会会刊

ISSN 1007-2276

CN 12-1261/TN

第47卷 | 第3期

Vol.47 | No.3

2018.03

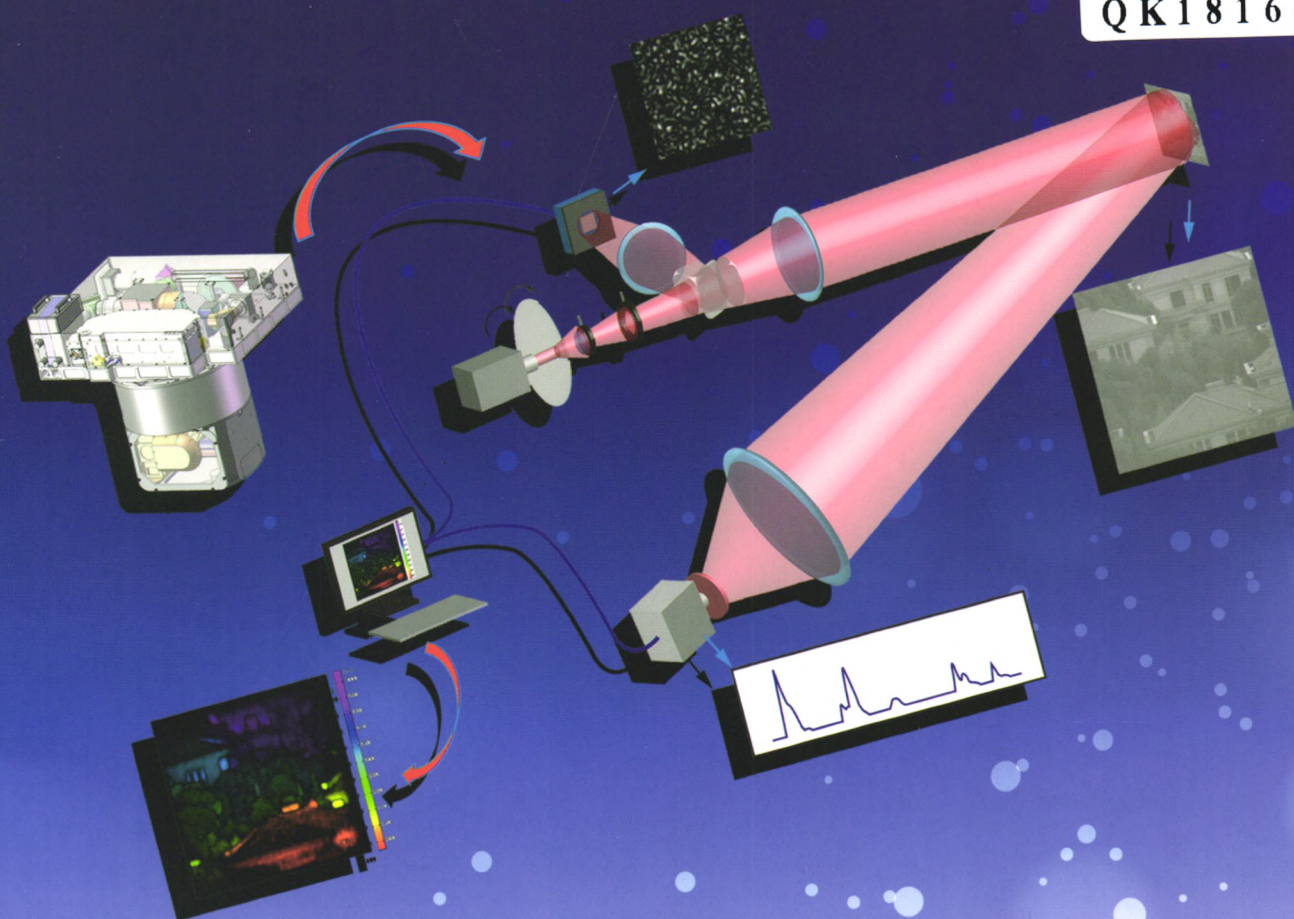


红外与激光工程

INFRARED AND LASER ENGINEERING



Q K 1 8 1 6 4 2 6



图片来源：面向实际应用的GISC Lidar近期研究进展与思考/龚文林等



天津津航技术物理研究所
《红外与激光工程》编辑部

目次

◆邀请报告◆

面向实际应用的 GISC Lidar 近期研究进展与思考	龚文林,王成龙,梅笑冬,等 0302001
天基大气环境观测激光雷达技术和应用发展研究	郑永超,王玉诏,岳春宇 0302002

◆特约专栏—“激光引信技术”◆

相干激光引信综述(特邀)	刘锡民,张建华,杨德钊,等 0303001
一种适用于空空导弹的激光灰度成像引信技术	王小驹,马 珩,张顺法 0303002
激光引信与预制破片战斗部引战配合设计	于玉亭,舒敬荣,丁伯圣 0303003
脉冲激光引信的信号特征提取方法及应用(特邀)	蔡克荣,仇理宽,高瑞林 0303004
探测距离对激光定距引信探测能力影响的分析与评价	姚宗辰,张 合,张祥金,等 0303005

◆仿生光学◆

仿生复眼成像系统角度误差	田钰麒,高天元,赵 宇,等 0310001
反射表面微变形的改进型龙虾眼透镜	赵 玄,欧阳名钊,付跃刚,等 0310002

◆激光技术及应用◆

激光雷达信号相位误差对合成孔径成像的影响和校正	胡 烜,李道京,田 鹤,等 0306001
相干测风激光雷达微弱信号的频率估计	周永升,马勋鹏,赵一鸣,等 0306002
钛合金表面激光熔覆制备低含硅量生物陶瓷涂层	孙楚光,刘均环,陈志勇,等 0306003
CdTe 和 CdS 量子点的非线性特性对比	常 存,隋净蓉,常 青,等 0306004
焊丝熔化填充方式对激光焊接熔池影响的数值模拟	彭 进,张文洁,王星星,等 0306005

◆红外技术及应用◆

面源红外诱饵干扰效能评估系统仿真研究	李韬锐,童中翔,李慎波,等 0304001
大表面复杂结构伪装遮障表面温度的简化分析方法	陈锦成,韩玉阁 0304002
中波红外高光谱仿真中的辐射影响模型(英文)	李 波,王祥凤,孙丽娜,等 0304003
带热流密度限制的推力可控导弹三维制导律	王宏涛,石德平,刘恒军 0304004

◆光学设计及仿真◆

2 m 望远镜消旋 K 镜转台的模型辨识	夏培培,邓永停,王志乾,等 0318001
月基极紫外相机指向机构控制系统	于 涛 0318002

◆先进光学材料◆

硫系玻璃在长波红外无热化连续变焦广角镜头设计中的应用	王 静,吴越豪,戴世勋,等 0321001
人工制备生物颗粒结构对宽波段消光性能的影响	黄宝钡,胡以华,顾有林,等 0321002
生物材料紫外红外复合消光性能测试	顾有林,曹光华,胡以华,等 0321003
离子束溅射氧化铝薄膜光学特性的热处理效应	王利栓,杨 霄,刘丹丹,等 0321004

◆大气光学◆

典型地区大气气溶胶谱分布和复折射率特征研究 耿 蒙,李学彬,秦武斌,等 0311001

混浊大气对偏振导航影响的研究 欧雅文,武鹏飞,魏合理 0311002

◆光电测量◆

基于正交柱面成像相机空间后方交会的三维坐标测量方法 杨凌辉,王丽君,林嘉睿,等 0317001

地基 SAR 基坑微形变监测方法研究 刘小阳,孙广通,李 峰,等 0317002

GPU 加速三维面形测量(英文) 赵亚龙,刘守起,张启灿 0317003

脉冲飞行时间激光测距系统中周期误差补偿 黄民双,刘晓晨,马 鹏 0317004

基于自抗扰控制的光电平台视轴稳定技术研究 方宇超,李梦雪,车 英 0317005

◆光电器件及应用◆

基于 AlGaIn/GaN 场效应晶体管的太赫兹焦平面成像传感器 罗木昌,孙建东,张志鹏,等 0320001

航天光学遥感相机多谱带滤光片设计与考核方法 常君磊,李富强,王伟刚,等 0320002

基于类对比度的 CCD 相关双采样自适应技术 李洪波,胡炳樑,余 璐,等 0320003

光学元件质量对红外光学系统信噪比的影响 游兴海,张 彬 0320004

◆信息获取与辨识◆

一种用于无人机的目标颜色核相关跟踪算法研究 曲蕴杰,莫宏伟,王常虹 0326001

基于回波闪烁效应识别光学目标的方法研究 单聪森,孙华燕,赵延仲 0326002

Contents

◆ Invited paper ◆

Recent research progress and thoughts on GISC Lidar with respect to practical applications	0302001
..... Gong Wenlin, Wang Chenglong, Mei Xiaodong, et al.	
Technical and application development study of space-borne atmospheric environment observation lidar	0302002
..... Zheng Yongchao, Wang Yuzhao, Yue Chunyu	

◆ Invited column-Laser fuze technology ◆

Review on coherent laser fuze(<i>Invited</i>)	0303001
..... Liu Ximin, Zhang Jianhua, Yang Dezhaoh, et al.	
Laser gray imaging fuze technology for air-to-air missile	0303002
..... Wang Xiaojun, Ma Heng, Zhang Shunfa	
Design of fuze-warhead coordination based on laser fuze and prefabricated fragment ammunition	0303003
..... Yu Yuting, Shu Jingrong, Ding Bosheng	
Feature extraction methods and applications of signal feature for pulse laser fuze(<i>Invited</i>)	0303004
..... Cai Kerong, Qiu Likuan, Gao Ruilin	
Analysis and evaluation of detection distance effect on detection capability of laser fixed-distance fuze	0303005
..... Yao Zongchen, Zhang He, Zhang Xiangjin, et al.	

◆ Bionic optics ◆

Angle error of bionic compound eye imaging system	0310001
..... Tian Yuqi, Gao Tianyuan, Zhao Yu, et al.	
Improved lobster eye lens based on micro-deformation of reflective wall	0310002
..... Zhao Xuan, Ouyang Mingzhao, Fu Yuegang, et al.	

◆ Laser technology and application ◆

Impact and correction of phase error in ladar signal on synthetic aperture imaging	0306001
..... Hu Xuan, Li Daojing, Tian He, et al.	
Frequency estimation of the weak signal of the Coherent Wind Lidar	0306002
..... Zhou Yongsheng, Ma Xunpeng, Zhao Yiming, et al.	
Cladding bio-ceramic coatings of low SiO ₂ -HA on the surface of titanium alloy	0306003
..... Sun Chuguang, Liu Junhuan, Chen Zhiyong, et al.	
Comparison of nonlinear properties of CdTe and CdS quantum dots	0306004
..... Chang Cun, Sui Jingrong, Chang Qing, et al.	
Numerical simulation of effect of filler wire melting and filling mode on molten pool in laser welding	0306005
..... Peng Jin, Zhang Wenjie, Wang Xingxing, et al.	

◆ Infrared technology and application ◆

Simulation study of jamming effectiveness evaluation system of surface source infrared decoy	0304001
..... Li Taorui, Tong Zhongxiang, Li Shenbo, et al.	
Simplified analysis method of the surface temperature of complex structure camouflage screen with large surface	0304002
..... Chen Jincheng, Han Yuge	
Radiation influence model in MWIR hyperspectral simulation	0304003
..... Li Bo, Wang Xiangfeng, Sun Lina, et al.	
Three-dimensional guidance law for missile of adjustable thrust with heat flux limit	0304004
..... Wang Hongtao, Shi Deping, Liu Hengjun	

◆ Optical design and simulation ◆

Model identification for K mirror turntable of 2 m telescope	0318001
..... Xia Peipei, Deng Yongting, Wang Zhiqian, et al.	

Control system of pointing mechanism for lunar based extreme ultraviolet camera Yu Tao 0318002

◆ Advanced optical materials ◆

Application of chalcogenide glass in designing a long-wave infrared athermalized continuous zoom wide-angle lens
..... Wang Jing, Wu Yuehao, Dai Shixun, et al. 0321001

Influences of artificial biological particles structures on broadband extinction performance
..... Huang Baokun, Hu Yihua, Gu Youlin, et al. 0321002

Measurement of ultraviolet and infrared composite extinction performance of biological materials
..... Gu Youlin, Cao Guanghua, Hu Yihua, et al. 0321003

Annealing effect of the optical properties of tantalum oxide thin film prepared by ion beam sputtering
..... Wang Lishuan, Yang Xiao, Liu Dandan, et al. 0321004

◆ Atmospheric optics ◆

Research on the characteristics of aerosol size distribution and complex refractive index in typical areas of China
..... Geng Meng, Li Xuebin, Qin Wubin, et al. 0311001

Influence of turbid atmosphere on polarization navigation Ou Yawen, Wu Pengfei, Wei Heli 0311002

◆ Photoelectric measurement ◆

3D coordinate measurement method based on space resection of the orthogonal cylindrical imaging camera
..... Yang Linghui, Wang Lijun, Lin Jiarui, et al. 0317001

Research on microdeformation monitoring of foundation pit based on ground-based SAR
..... Liu Xiaoyang, Sun Guangtong, Li Feng, et al. 0317002

3D shape measurement accelerated by GPU Zhao Yalong, Liu Shouqi, Zhang Qican 0317003

Periodic error compensation of pulsed time-of-flight laser ranging system
..... Huang Minshuang, Liu Xiaochen, Ma Peng 0317004

Study on ADRC based boresight stabilized technology of photoelectric platform
..... Fang Yuchao, Li Mengxue, Che Ying 0317005

◆ Photoelectric device and application ◆

Terahertz focal plane imaging array sensor based on AlGaIn/GaN field effect transistors
..... Luo Muchang, Sun Jiandong, Zhang Zhipeng, et al. 0320001

Multi-band filter design and assessment for space optical-remote-sensing camera
..... Chang Junlei, Li Fuqiang, Wang Weigang, et al. 0320002

Adaptive technique based on pseudo-contrast for determining CCD correlated double sampling
..... Li Hongbo, Hu Bingliang, Yu Lu, et al. 0320003

Influence of optical component quality on signal to noise ratio in infrared optical systems You Xinghai, Zhang Bin 0320004

◆ Information acquisition and identification ◆

A target color kernel correlation tracking algorithm for UAVs Qu Yunjie, Mo Hongwei, Wang Changhong 0326001

Research on optical target identification based on echo scintillation effect
..... Shan Congmiao, Sun Huayan, Zhao Yanzhong 0326002

BIRD 210

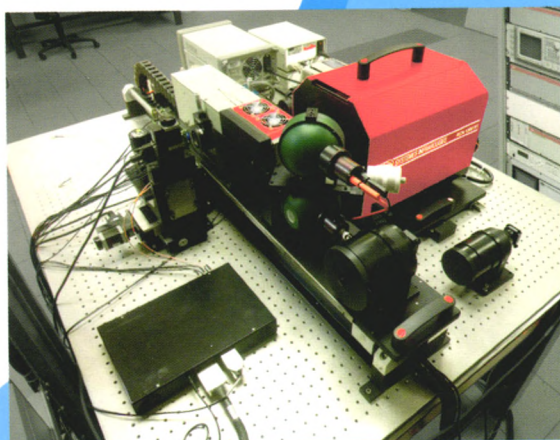
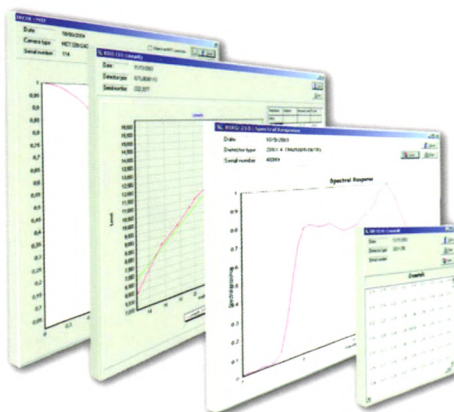
焦平面探测器测试系统

主要测试功能:

- ◇ 非均匀性校正
- ◇ 坏像元的定位
- ◇ RMS噪声
- ◇ 固定图案噪声
- ◇ 响应率
- ◇ 探测率
- ◇ NETD
- ◇ 动态范围/线性度
- ◇ 相对光谱响应/光谱因子
- ◇ 串音/敏感面积
- ◇ MTF

★ 整合资源, 优化销售渠道, 做红外测试和全景监控系统领域的开拓者!
HGH成功收购美国光电工业公司EOI。

★ 全参数测试算法符合国家标准GB/T 17444-2013《红外焦平面阵列参数测试方法》



HGH Systèmes Infrarouges

10 Rue Maryse Bastié
91430 IGNY - FRANCE
Tel: +33 1 69 35 47 70
Fax: +33 1 69 35 47 80

法国HGH红外系统股份公司北京代表处
北京东城区东直门南大街14号
北京保利大厦办公楼974室 (100027)
电话: 010 - 6551 5319
传真: 010 - 6551 5318

ISSN 1007-2276



万方数据

刊号 ISSN 1007-2276
CN 12-1261/TN

邮发代号 国内 6-133
国外 BM1766

国内定价 80.00元