

## 目次

### 光电工程系统技术

- 大气散射光偏振特性分析 ..... 杨明,王宝荣,李颖杰(1)  
1.06  $\mu\text{m}$  激光大气散射模型研究 ..... 赵宏鹏,雷萍,姚梅等(6)  
红外辐射强度测量系统设计 ..... 华振斌,孟凡斌(10)  
光学窗口形变对平行光管像质影响 ..... 吕保斌,杨利华,马臻等(13)  
光电探测多传感器数据融合方法研究 ..... 周炳玉,任滢(18)  
机载光电探测航姿信息融合算法研究 ..... 王恒立,朱卓(22)  
机载红外诱饵所需持续时间计算方法分析 ..... 于志良,郭永利,李春林(27)  
WDM 光网络中一种基于 SRLG 限制的动态共享保护算法研究 ..... 胡刚毅,毛期俭,颜红(30)

### 光电探测技术

- 连续波激光相干探测技术研究 ..... 任莹,王昌龙(33)  
短脉冲激光信号接收灵敏度的研究 ..... 何初冬,邱琪(37)

### 光电器件与材料

- 发光二极管的色度分析 ..... 曾华阳,刘宝林,黄文达等(40)  
CdTe 多晶薄膜的同质结与异质结 ..... 王宏臣(44)

### 电路与控制

- VxWorks 下多串口通信设计 ..... 蒲元远,孙大维(47)  
基于 ARM 的以太网接口电路设计 ..... 刘蒙,王静(51)  
基于 PS021 的微小电容测量模块 ..... 戴丽霞,马铁华,刘双峰(54)  
高帧频视频图像预处理电路的设计与实现 ..... 曾祥萍,金炜东(58)  
C51 与单片机系统多级菜单的模块化设计 ..... 汪高勇,宋毅恒,尚举邦(62)  
基于 DM642 的嵌入式可见光图像识别系统硬件设计与实现 ..... 陈沛然,张晓霞,王祥斌等(67)

### 信号与信息处理

- 合成孔径雷达原始信号的模拟方法 ..... 孙寒冰,曲长文,侯海平(71)  
多源图像彩色融合效果评价研究 ..... 荆绍威,杨风暴,李申燕(75)  
分数阶 Fourier 域非均匀采样 LFM 信号的检测概率 ..... 邹世杰,刘锋,徐会法等(80)

### 简讯

- 人类辅助光学识别/通告威胁规避系统 ..... (5)  
以色列新型远程红外传感器载荷 ..... (36)  
Elop 公司系列步兵热武器瞄准具 ..... (43)  
Elix-IR 红外威胁告警系统 ..... (43)

企业介绍:北京高博特公司(封二、封三)激光照射器空间参数综合测试评估系统(插1)北京欧普特科技有限公司(插2)

# ELECTRO-OPTIC TECHNOLOGY APPLICATION

Vol. 24 No. 2 (Series No. 105)

Bimonthly, April 2009

---

## CONTENTS

### Engineering System Technology

- Polarization Characteristics of Atmospheric Scattering Light ..... YANG Ming, WANG Bao-rong, LI Ying-jie(1)
- Atmospheric Scattering Model of 1.06  $\mu\text{m}$  Laser ..... ZHAO Hong-peng, LEI Ping, YAO Mei et al(6)
- Design of Measuring System for Object Infrared Radiation Intensity ..... HUA Zhen-bin, MENG Fan-bin(10)
- Influence of Optic Window Deformation on Collimator Image Quality ..... LV Bao-bin, YANG Li-hua, MA Zhen et al(13)
- Method of Multi-Sensor Data Fusion in Electro-Optic Detection ..... ZHOU Bing-yu, REN Ying(18)
- Data Fusion Algorithm of Attitude Heading for Airborne Electro-Optic Detection  
..... WANG Heng-li, ZHU Zhuo(22)
- Calculation Method Analysis of Airborne IR Decoy's Continuous Time ..... YU Zhi-liang, GUO Yong-li, LI Chun-lin(27)
- Dynamic Shared Path Protection Algorithm Based on SRLG Constraint in WDM Optical Network  
..... HU Gang-yi, MAO Qi-jian, YAN Hong(30)

### Detection Technology

- Continuous Wave Laser Coherent Detection Technology ..... REN Ying, WANG Chang-long(33)
- Receiving Sensitivity of Short-Pulse Laser Signals ..... HE Chu-dong, QIU Qi(37)

### Devices and Materials

- LED Color Analysis ..... ZENG Hua-yang, LIU Bao-lin, HUANG Wen-da et al (40)
- Homojunction and Heterojunction in Cdte Polycrystalline Thin Films ..... WANG Hong-chen:(44)

### Electrical Circuit and Control

- Design of Multi-SerialPorts Communication Based on VxWorks  
..... PU Yuan-yuan, SUN Da-wei(47)
- Design of Ethernet Interface Circuit Based on ARM ..... LIU Meng, WANG Jing(51)
- Micro Capacitance Measurement Module Based on PS021 ..... DAI Li-xia, MA Tie-hua, LIU Shuang-feng(54)
- Design and Implementation of Video Preprocessing Circuits for High-Frame Rate Image  
..... ZENG Xiang-ping, JIN Wei-dong(58)
- Multi-lever Menu Modularization Design for C51 and Single-chip Microcomputer System  
..... WANG Gao-yong, SONG Yi-heng, SHANG Ju-bang(62)
- Hardware Design and Implementation of Embedded Visible-Light Video Image Identification System Based on DM642  
..... CHEN Pei-ran, ZHANG Xiao-xia, WANG Xiang-bin et al(67)

### Signal and Information Processing

- SAR Raw Signal Simulation Method ..... SUN Han-bing, QU Chang-wen, HOU Hai-ping(71)
- Effect Evaluation of Multi-source Image Color Fusion ..... JING Shao-wei, Yang Feng-bao, LI Shen-yan(75)
- Detection Probability of Nonuniformly Sampled LFM Signals in Fractional Fourier Domain  
..... ZOU Shi-jie, LIU Feng, XU Hui-Fa et al(80)