

目次

□ 红外材料与器件

分子束外延 P-on-N HgCdTe As 扩散调控研究	沈川 杨辽 刘仰融 卜顺栋 王高等(799)
截止波长 2.2 μm 的平面型延伸波长 InGaAs 探测器	程吉凤 李雪 邵秀梅 李淘 王红真等(804)
InAsSb 势垒阻挡型红外探测器暗电流特性研究	陈冬琼 王海澎 秦强 邓功荣 尚发兰等(810)
甚长波碲镉汞红外焦平面探测器	李雄军 邹雷 赵鹏 杨超伟 熊伯俊等(818)

□ 太赫兹与毫米波技术

基于偏振调节的太赫兹量子级联激光器双光梳研究(封面文章)	杨思嘉 李子平 廖小瑜 王晨捷 黎华等(825)
青藏高原那曲对流云中过冷水的毫米波雷达反演研究	任涛 郑佳锋 刘黎平 邹明龙 陈绍婕等(831)
太赫兹空气相干探测技术引起的太赫兹脉冲畸变	杜海伟 龙江(844)
220 GHz 卷云非球形冰晶粒子雷达反射率因子与冰水含量关系研究	王彪 霍熠炜 郭兴 吴家骥(850)
毫米波肖特基二极管表征和在片测试方法	张傲 高建军(856)
用于超外差接收机提供本振源的高功率 510 GHz 单片集成三倍频器	何月 田遥岭 周人 蒋均 林长星等(863)
基于薄膜工艺的 1 030 GHz 混频器和 750~1 100 GHz 倍频器研制	孟进 张德海 牛斌 朱皓天 刘锶钰等(871)

□ 红外光谱与光谱分析

基于峰宽修正的玻璃药瓶内氧气残留浓度的检测研究	申帅 贺建军(879)
薄膜光学常数的原位测定	谢茂彬 吴智勇 崔恒毅 赵新潮 玄志一等(888)

□ 遥感技术与应用

基于 Multiloss-SAM-ConvLSTM 的北极航道独立海冰运动预测	郑付强 匡定波 胡勇 巩彩兰 黄硕(894)
---	------------------------

□ 红外及光电技术与应用

基于近红外小功率卫星激光测距研究	高添泉 吴先霖 张才士 周立祥 赵宏超等(905)
一种用于红外目标检测的高效流水线式 FPGA 加速器	陈少毅 汤心溢 王健 黄静思 李争(914)
一种单一增益下实现红外探测器大动态范围读出方法研究	汪鸿祎 张思韬 王绪泉 张永刚 黄松垒等(923)

□ 图像处理及软件仿真

基于分层细分超像素和信息完整性先验的红外图像去雾	李伟华 李范鸣 苗壮 谭畅 穆靖(930)
--------------------------------	-----------------------



本刊支持开放获取(Open Access)
彩色电子版内容获取
请扫描左侧二维码关注学报公众号

CONTENTS

Study on As diffusion control of MBE-grown P-on-N HgCdTe
..... SHEN Chuan, YANG Liao, LIU Yang-Rong, BU Shun-Dong, WANG Gao, CHEN Lu, HE Li (799)

Planar wavelength-extended In_{0.75}Ga_{0.25}As detector with 2.2- μ m cut-off wavelength CHENG Ji-Feng,
LI Xue, SHAO Xiu-Mei, LI Tao, WANG Hong-Zhen, MA Ying-Jie, YANG Bo, GONG Hai-Mei (804)

Research on dark current characteristics of InAsSb Barrier-blocking infrared detector
..... CHEN Dong-Qiong, WANG Hai-Peng, QIN Qiang, DENG Gong-Rong, SHANG Fa-Lan, TAN Ying,
KONG Jin-Cheng, HU Zan-Dong, TAI Yun-Jian, YUAN Jun, ZHAO Peng, ZHAO Jun, YANG Wen-Yun (810)

Very long wave HgCdTe infrared focal plane detector ... LI Xiong-Jun, ZOU Lei, ZHAO Peng, YANG Chao-Wei,
XIONG Bo-Jun, WANG Xiang-Qian, ZHANG Ying-Xu, LIU Yan-Zhen, LI Hong-Fu, ZHAO Yu-Song,
ZHANG Shao-Yu, LI Li-Hua (818)

Study of dual-comb terahertz quantum cascade lasers based on polarization modulation(**Cover Article**).....
..... YANG Si-Jia, LI Zi-Ping, LIAO Xiao-Yu, WANG Chen-Jie, LI Hua, CAO Jun-Cheng (825)

Retrieval of supercooled water in convective clouds over Nagqu of the Tibetan Plateau using millimeter-wave radar
measurements REN Tao, ZHENG Jia-Feng, LIU Li-Ping,
ZOU Ming-Long, CHEN Shao-Jie, HE Jing-Shu, LI Jian-Jie (831)

Distortions of terahertz pulses induced by the air coherent detection technique... DU Hai-Wei, LONG Jiang (844)

Relationship between radar reflectivity factor and ice water content of non-spherical cirrus ice crystals
at 220 GHz WANG Biao, HUO Yi-Wei, GUO Xing, WU Jia-Ji (850)

Millimeter wave Schottky diode characterization and on-wafer measurement... ZHANG Ao, GAO Jian-Jun (856)

High power 510 GHz monolithic integrated frequency tripler for local oscillation sources in heterodyne receiver...
..... HE Yue, TIAN Yao-Ling, ZHOU Ren, JIANG Jun, LIN Chang-Xing, SU Wei (863)

Design of a 1 030 GHz mixer and a 750~1 100 GHz tripler based on thin-film technology MENG Jin,
ZHANG De-Hai, NIU Bin, ZHU Hao-Tian, LIU Si-Yu, FAN Dao-Yu, CHEN Sheng-Tang, ZHOU Ming (871)

Detection of oxygen residual concentration in medicine glass vials based on peak width correction
..... SHEN Shuai, HE Jian-Jun (879)

On-site determination of optical constants for thin films XIE Mao-Bin, WU Zhi-Yong, CUI Heng-Yi,
ZHAO Xin-Chao, XUAN Zhi-Yi, LIU Qing-Quan, LIU Feng, SUN Liao-Xin, WANG Shao-Wei (888)

Prediction of independent sea ice motion in Arctic channel based on Multiloss-SAM-ConvLSTM
..... ZHENG Fu-Qiang, KUANG Ding-Bo, HU Yong, GONG Cai-Lan, HUANG Shuo (894)

Satellite laser ranging research based on near-infrared low-power laser GAO Tian-Quan, WU Xian-Lin,
ZHANG Cai-Shi, ZHOU Li-Xiang, ZHAO Hong-Chao, HAN Xi-Da, LIU Sheng-Qian, LI Ming (905)

An ultra-efficient streaming-based FPGA accelerator for infrared target detection
..... CHEN Shao-Yi, TANG Xin-Yi, WANG Jian, HUANG Jing-Si, LI Zheng (914)

A study on a method to achieve large dynamic range readout of infrared detectors with a single gain ... WANG Hong-Yi,
ZHANG Si-Tao, WANG Xu-Quan, ZHANG Yong-Gang, HUANG Song-Lei, FANG Jia-Xiong (923)

Infrared image dehazing based on hierarchical subdivision superpixels and information integrity prior
..... LI Wei-Hua, LI Fan-Ming, MIAO Zhuang, TAN Chang, MU Jing (930)