

太赫兹科学与电子信息学报

TAIHEZI KEXUE YU DIANZI XINXI XUEBAO

第 16 卷 第 4 期 2018 年 8 月

目 次

太赫兹科学技术

- G 波段双注折叠波导行波管的注-波相互作用特性·····高鹏鹏, 张兆传, 刘文鑫, 等 (571)
- GaP,GaAs 和 PPLN 晶体级联差频产生太赫兹辐射·····黄俊滔, 饶志明, 谢芳森 (576)
- 低损耗波纹波导的传输特性·····陈 驰, 赵 虹, 傅文杰, 等 (584)
- 基于石墨烯材料的太赫兹波探测器研究进展·····全文浩, 刘北云, 杨炎翰, 等 (588)
- 440 GHz 串联式宽带二倍频器设计·····吴成凯, 张 勇 (595)
- 沙尘暴对太赫兹波传播的影响·····董群锋, 郭立新, 李应乐, 等 (599)

探测制导、测控通信与电子对抗

- 高分辨力极化 SAR 图像城市区域车辆目标检测·····高军山, 陈 杭, 林慧平, 等 (603)
- 一种 LTE 多小区干扰环境下的信道估计方法·····胡 杨, 胡 蝶 (609)
- 海面上方低飞小目标多普勒谱研究·····杨鹏举, 吴 瑞, 赵 晔, 等 (614)
- 多雷达组网检测系统技术·····徐 勇, 刘文松, 翟海涛 (619)
- 基于 AD9361 的智能屏蔽系统设计与实现·····杨 勇, 夏文龙, 史晓荻, 等 (625)
- 基于压缩感知的 CFAR 目标检测在机会雷达中的应用·····刘长远, 马俊虎, 甘 露 (630)
- 基于集成光学的波束形成以及误差分析·····王书楠, 余胜武, 杨 飞, 等 (637)
- 海洋背景下雷达测高优化的一种方法·····张进华, 黄 亮, 范家强 (645)
- Burg 算法在雷达测速中的应用·····朱 燕, 刘逸通 (649)

电磁场与微波

- 一种高精度偏置反射面天线模具设计·····江文剑, 史 明, 杨亚宁 (653)
- 高功率激光装置同轴电缆电磁脉冲耦合仿真·····于瑞珍, 易 涛, 景 峰, 等 (658)
- 混合 ACA 和 MLFMA 方法计算复合目标电磁散射·····刘志伟, 唐 丹, 结顺利, 等 (662)
- X 波段阶梯阻抗微带通滤波器设计·····张 威, 叶龙芳, 许 雄, 等 (668)
- 用于雷达接收机检测的平面固态噪声源·····赵 晖, 刘 锋, 李 庆 (672)
- 基于 Phase-Refining 技术的微波宽带频率合成器·····李智鹏, 王 平, 曾 荣, 等 (676)
- PWB 方法在矩形开孔电大腔中的应用及其拓展·····欧阳婷, 刘 强, 赵 翔, 等 (682)
- 基于注入锁频理论的扫频磁控管的理论与仿真·····李济海, 高中杰, 朱铨丞, 等 (688)
- 发射机谐波电平测量方法·····范秋虎, 何洪涛, 刘心愿, 等 (692)

信号与信息处理、计算机与控制

- 一种引入相位补偿的直接时延估计算法·····伍 警, 蒋鸿宇, 李 兵, 等 (697)
- ICF 微靶数字化制造设计与实现·····粟 强, 杨存榜, 张 涛, 等 (703)
- 基于等增益合成的多天线信号盲检测算法·····万英杰, 胡赞鹏, 沈智翔 (709)
- 基于聚类技术的多阈值图像分割技术·····陈 强 (715)
- 通过低功耗蓝牙串口启动的智能物联网关·····邱继云, 陈 翔 (719)

微电子、微系统与物理电子学

- 脉冲放电回路电感的计算·····刘云龙, 尚绍环, 金大志 (724)
- 带有过温保护和自适应调节的 LED 驱动电路·····夏俊雅, 曾以成, 崔晶晶 (729)
- 一种基于时延配置表的 FPGA 静态时序分析算法·····喻 伟, 陈恩耀, 马海燕, 等 (735)
- 起爆方式对反应式脉冲发生器的影响试验·····潘绪超, 何 勇, 沈晓军, 等 (742)
- 基于 RTD 的新型全加器设计·····冯 杰, 姚茂群 (748)
- 固有频率压电堆激励无损测量方法·····颜刚毅 (753)

资讯

- 微纳米能源系统研究领域的最新进展——NGPT 2018 国际会议综述·····(n1)

简讯

- 会讯几则·····(n2)
- 四川省电子学会曙光分会第十九届学术年会征文通知(第二轮)·····(n3)
- 第四届全国太赫兹科学技术与应用学术交流会征文通知(第二轮)·····(n4)

期刊基本参数: CN51-1746/TN*2003*b*A4*186*zh*P*¥20.00*1300*35*2018-8

CONTENTS

TERAHERTZ SCIENCE AND TECHNOLOGY

Beam-wave interaction characteristics of G-band two-beam Folded Waveguide Traveling Wave Tube..... *GAO Pengpeng, ZHANG Zhaochuan, LIU Wenxin, et al.* (571)

Cascaded difference-frequency generation for THz in GaP,GaAs and PPLN crystals..... *HUANG Juntao, RAO Zhiming, XIE Fangsen* (576)

Low-loss corrugated waveguide transmission characteristics..... *CHEN Chi, ZHAO Hong, FU Wenjie, et al.* (584)

Research progress of graphene based terahertz wave detectors..... *TONG Wenhao, LIU Beiyun, YANG Yanhan, et al.* (588)

Design of a 440 GHz series broadband frequency doubler..... *WU Chengkai, ZHANG Yong* (595)

Effect of sand and dust storms on Terahertz electromagnetic wave propagation characteristics..... *DONG Qunfeng, GUO Lixin, LI Yingle, et al.* (599)

DETECTION, GUIDANCE, TTC, COMMUNICATION, ELECTRONIC COUNTERMEASURE

Vehicle detection over urban areas in high resolution polarimetric SAR images..... *GAO Junshan, CHEN Hang, LIN Huiping, et al.* (603)

A channel estimation method under LTE multi-cell interference environment..... *HU Yang, HU Die* (609)

Doppler spectrum of low-flying small target above time-varying sea surface..... *YANG Pengju, WU Rui, ZHAO Ye, et al.* (614)

Technology of multi-radar detection system..... *XU Yong, LIU Wensong, ZHAI Haitao* (619)

Design and implementation of intelligent shielding system based on AD9361..... *YANG Yong, XIA Wenlong, SHI Xiaodi, et al.* (625)

Application of CA-CFAR with Compressive Sensing in opportunistic radar..... *LIU Changyuan, MA Junhu, GAN Lu* (630)

Beam-forming based on integrated optics and error analysis..... *WANG Shunan, YU Shengwu, YANG Fei, et al.* (637)

An optimization method of radar height measurement on sea background..... *ZHANG Jinhua, HUANG Liang, FAN Jiaqiang* (645)

Application of Burg algorithm in radar speed measurement..... *ZHU Yan, LIU Yitong* (649)

ELECTROMAGNETIC FIELDS & MICROWAVE

A high-precision mould design method of offset-reflector antennas..... *JIANG Wenjian, SHI Ming, YANG Yaning* (653)

Simulation on coaxial cable electromagnetic pulse coupling at high power laser facility..... *YU Ruizhen, YI Tao, JING Feng, et al.* (658)

Calculation of scattering from composite targets by hybrid ACA and MLFMA..... *LIU Zhiwei, TANG Dan, JIE Shunli, et al.* (662)

Design of multi-mode microstrip bandpass filter using stepped impedance resonator at X-band..... *ZHANG Wei, YE Longfang, XU Xiong, et al.* (668)

Planar solid-state noise source for radar receiver test..... *ZHAO Hui, LIU Feng, LI Qing* (672)

A wideband frequency synthesizer based on Phase-Refining technology..... *LI Zhipeng, WANG Ping, ZENG Rong, et al.* (676)

Application and extension of PWB method in an electrically large cavity with rectangular aperture..... *OUYANG Ting, LIU Qiang, ZHAO Xiang, et al.* (682)

Theoretical and simulation study on sweep frequency magnetron based on injection-locking theory..... *LI Jihai, GAO Zhongjie, ZHU Huacheng, et al.* (688)

Measurement method of transmitter harmonic level..... *FAN Qiuhu, HE Hongtao, LIU Xinyuan, et al.* (692)

SIGNAL AND INFORMATION PROCESSING, COMPUTER AND CONTROL

An explicit time delay estimation algorithm with phase compensation..... *WU Jing, JIANG Hongyu, LI Bing, et al.* (697)

ICF target design and implementation of digitized manufacturing..... *SU Qiang, YANG Cunbang, ZHANG Tao, et al.* (703)

Multi-antenna signal blind detection algorithm based on equal gain combining..... *WAN Yingjie, HU Yunpeng, SHEN Zhixiang* (709)

Multi-threshold image segmentation based on clustering method..... *CHEN Qiang* (715)

Bluetooth Low Energy UART booting based smart gateway for Internet of Things..... *QIU Jiyun, CHEN Xiang* (719)

MICRO-ELECTRONICS, MICRO-SYSTEM AND PHYSICAL ELECTRONICS

Calculation of inductance of pulse discharge circuit..... *LIU Yunlong, SHANG Shaohuan, JIN Dazhi* (724)

LED drive circuit with over-temperature protection and adaptive adjustment..... *XIA Junya, ZENG Yicheng, CUI Jingjing* (729)

A FPGA static timing analysis algorithm based on delay collocation table..... *YU Wei, CHEN Enyao, MA Haiyan, et al.* (735)

Influence of electromagnetic pulse generator based on fast chemical reactions..... *PAN Xuchao, HE Yong, SHEN Xiaojun, et al.* (742)

Design of novel full-adder based on RTD..... *FENG Jie, YAO Maoqun* (748)

Nondestructive measurement of natural frequency by excitation of a piezoelectric stack..... *YAN Gangyi* (753)