

太赫兹科学与电子信息学报

TAIHEZI KEXUE YU DIANZI XINXI XUEBAO

第17卷 第4期 2019年8月

目 次

太赫兹科学技术

双顶棚极石墨烯的太赫兹信号源.....	李文东, 刘景萍, 常梦璐	(547)
基于肖特基二极管的 670 GHz 四次谐波混频器设计.....	纪广玉, 张德海, 孟进	(552)
面向复杂表面物体的 3D 太赫兹成像技术.....	雷静, 祁峰	(557)
乳清酸的太赫兹光谱研究.....	郑转平, 巩稼民	(563)
THz time domain monostatic radar cross section measurement of metallic plates and dihedrons.....	HUO Yiwei, WU Yajun, WANG Xiaobing	(567)
太赫兹全息成像技术在太阳电池中的应用.....	史珂, 全文浩, 邹蕊娇, 等	(572)

探测制导、测控通信与电子对抗

基于 ES-DOA 估计的室内非法信号源定位方法.....	陈章, 施伟, 刘斌, 等	(577)
逆伽马纹理复合高斯杂波参数的贝叶斯估计方法.....	许述文, 王乐, 曾威良, 等	(583)
一种双频双馈无人机干扰天线的设计与实现.....	谢飞, 于鹏, 刘伯栋, 等	(589)
网络化作战机载射频传感器综合.....	刘海宁	(594)
多部 VHF/UHF 频段机载通信电台同址干扰影响分析.....	刘伯栋, 于鹏, 谢飞, 等	(599)
基于 GEO SAR 编队飞行的动目标检测.....	崔畅, 胡程, 董锡超	(604)
一种用于高精度双框架伺服系统的标定方法.....	张勇, 吴浩, 王伟明, 等	(610)

电磁场与微波

适用于 5G 电磁屏蔽的介质开孔型频率选择表面设计.....	许留留, 闫丽萍, 赵翔	(616)
温度和机械弯曲引起的同轴电缆相位变化特性.....	戈弋, 黄华, 袁欢	(621)
一种水平全向平面偶极子阵列天线.....	苏金花, 陈星	(627)
超宽带双极化平面交叉偶极子天线设计.....	李杰, 陈星	(632)
典型雷达电磁环境效应特征数据模拟系统.....	艾小锋, 赵峰, 王满喜	(636)
超宽带馈源技术发展综述.....	伍洋, 杜彪, 马军	(641)
激光加工参数对球形频率选择表面质量的影响.....	邢校营, 姜开宇, 赵骥, 等	(647)
基于复杂系统的电磁兼容设计方法可行性分析.....	卫宁	(653)
基于 S-PIN 二极管的频率可重构天线设计.....	史向柱, 刘少斌, 唐丹, 等	(657)
高功率微波装置散热热沉传热流动特性.....	潘瑶, 刘欣	(661)
全金属频率选择表面设计与验证.....	江涛, 侯沁芳, 斯扬, 等	(666)
一种基于遗传算法的不等间距二维非周期阵面.....	谢少毅, 李佳伟, 郭乐田, 等	(671)
紧缩场静区幅相性能现场校准系统.....	马永光, 吴翔, 何鑫, 等	(676)

信号与信息处理、计算机与控制

频率步进伪码-线性调频信号处理方法及成像.....	刘加方, 张云华, 董晓	(681)
基于大数据的雷达健康管理.....	夏勇, 丁岐鹏, 尤路	(686)
基于分段压缩和原子范数的跳频信号参数估计.....	李慧启, 李立春, 张云飞, 等	(691)
水面自主艇平台总体技术.....	赵苗, 冯文川	(698)
激光雷达在电力巡线应用中的计算方法.....	韩晓言, 何静, 游安清	(703)

微电子、微系统与物理电子学

基于 ICPT 原理的高压变换器应用.....	刘有彬, 杜涛, 施惠	(709)
一种 24 GHz CMOS 功率放大器设计.....	彭尧, 何进, 王冲, 等	(716)
4H-SiC 浮动结 JBS 器件的设计方法.....	孙腾飞, 汤晓燕, 谢思亮, 等	(721)
低电压高效率 W 波段脉冲行波管设计.....	杜英华, 蔡军, 张小青, 等	(726)
抗总剂量辐射华夫饼功率管版图设计.....	周泉, 罗萍, 何林彦, 等	(730)

简讯

编委风采: 冯进军—奋战·荣誉 国际真空电子学领域最高奖花落中国电科.....	(n1)
会讯几则.....	(n2)

JOURNAL OF TERAHERTZ SCIENCE AND ELECTRONIC INFORMATION TECHNOLOGY

Vol.17 No.4 Aug. 2019

CONTENTS

TERAHERTZ SCIENCE AND TECHNOLOGY

Terahertz signal source by double-top-gate graphene.....	LI Wendong, LIU Jingping, CHANG Menglu (547)
Design of a 670 GHz fourth harmonic mixer based on Schottky diode.....	JI Guangyu, ZHANG Dehai, MENG Jin (552)
Towards THz 3D imaging for objects with complex shape	LEI Jing, QI Feng (557)
Investigation on THz spectrum of orotic acid by THz-TDS.....	ZHENG Zhanping, GONG Jiamin (563)
THz time domain monostatic radar cross section measurement of metallic plates and dihedrons.....	HUO Yiwei, WU Yajun, WANG Xiaobing (567)
Application of terahertz holography in solar cells.....	SHI Ke, TONG Wenhao, ZOU Ruijiao, et al. (572)

DETECTION, GUIDANCE, TTC, COMMUNICATION, ELECTRONIC COUNTERMEASURE

A kind of ES-DOA estimation based method for indoor illegal signal source localization.....	CHEN Zhang, SHI Wei, LIU Bin, et al. (577)
Bayesian estimation method for Compound Gaussian Clutter model with inverse Gamma texture.....	XU Shuwen, WANG Le, ZENG Weiliang, et al. (583)
Design and implementation of a dual-band dual-feed UAV interference antenna.....	XIE Fei, YU Peng, LIU Bodong, et al. (589)
Airborne integrated radio frequency sensor of network centric warfare.....	LIU Haining (594)
Analysis of co-site interference effect on VHF/UHF airborne radios.....	LIU Bodong, YU Peng, XIE Fei, et al. (599)
Moving target detection based on the GEO SAR formation.....	CUI Chang, HU Cheng, DONG Xichao (604)
A calibration method for high-precision double gimbals servo system.....	ZHANG Yong, WU Hao, WANG Weiming, et al. (610)

ELECTROMAGNETIC FIELDS & MICROWAVE

Design of a Frequency Selective Surface with vent holes through substrate for 5G electromagnetic shielding.....	XU Liuli, YAN Liping, ZHAO Xiang (616)
Phase characteristics of coaxial cable caused by temperature and mechanical bending.....	GE Yi, HUANG Hua, YUAN Huan (621)
A horizontally omnidirectional planar dipole array antenna.....	SU Jinhua, CHEN Xing (627)
Design of ultra-wideband dual-polarized planar cross-dipole antenna.....	LI Jie, CHEN Xing (632)
Data simulation system of electromagnetic environment effects on typical radar.....	AI Xiaofeng, ZHAO Feng, WANG Manxi (636)
Overview of the development of Ultra-Wideband feed technology.....	WU Yang, DU Biao, MA Jun (641)
Effect of laser processing parameters on the surface quality of spherical Frequency Selective Surface.....	XING Xiaochang, JIANG Kaiyu, ZHAO Ji, et al. (647)
Feasibility analysis of EMC design method based on complex system	WEI Ning (653)
Frequency reconfigurable antenna design based on S-PIN diode.....	SHI Xiangzhu, LIU Shaobin, TANG Dan, et al. (657)
Heat transfer and flow characteristics of heat sink in high power microwave devices	PAN Yao, LIU Xin (661)
Design and experimental verification of an all-metal Frequency Selective Surface.....	JIANG Tao, HOU Qinsang, SI Yang, et al. (666)
A genetic algorithm based unequal spacing 2D aperiodic array design	XIE Shaoyi, LI Jiawei, GUO Letian, et al. (671)
Calibration system for amplitude and phase performance of quiet zone of Compact Antenna Test Range.....	MA Yongguang, WU Xiang, HE Xin, et al. (676)

SIGNAL AND INFORMATION PROCESSING, COMPUTER AND CONTROL

Processing method of stepped PRBC-LFM signal and imaging.....	LIU Jiasang, ZHANG Yunhua, DONG Xiao (681)
Radar Prognostic and Health Management technology based on big data.....	XIA Yong, DING Qijuan, YOU Lu (686)
Parameter estimation of frequency hopping signals based on piecewise compression and atomic norm.....	LI Huiqi, LI Lichun, ZHANG Yunfei, et al. (691)
Platform system technology of Unmanned Surface Vessel.....	ZHAO Zhuo, FENG Wenchuan (698)
Algorithms in Lidar patrolling electric power transmission lines.....	HAN Xiaoyan, HE Jing, YOU Anqing (703)

MICRO-ELECTRONICS, MICRO-SYSTEM AND PHYSICAL ELECTRONICS

Application of high-voltage converter based on the theory of ICPT.....	LIU Youbin, DU Tao, SHI Hui (709)
Design of a 24 GHz CMOS power amplifier.....	PENG Yao, HE Jin, WANG Chong, et al. (716)
Design of 4H-SiC Floating Junction–Junction Barrier Schottky device.....	SUN Tengfei, TANG Xiaoyan, XIE Siliang, et al. (721)
Design of a low voltage high efficiency W-band pulsed Traveling Wave Tube.....	DU Yinghua, CAI Jun, ZHANG Xiaoqing, et al. (726)
Design of a TID radiation hardened power MOSFET with waffle layout.....	ZHOU Xiao, LUO Ping, HE Linyan, et al. (730)