

太赫兹科学与电子信息学报

TAIHEZI KEXUE YU DIANZI XINXI XUEBAO

第 20 卷 第 1 期 2022 年 1 月

目 次

专栏：电磁环境大数据挖掘与利用(二)

- C-V2X 资源分配方法研究综述.....王巨震, 江 昊, 陈琪美, 等 (1)
- 基于电磁环境数据的信息挖掘与关联分析.....李 爽, 刘海鹏, 郭兰图 (8)
- 基于大数据的复杂环境下调制分类方法.....师长立, 韦统振, 吴理心, 等 (16)
- 一种面向电磁识别模型的分散计算方法.....陆鹏威, 颜子彦, 张 伟, 等 (22)
- 基于深度学习的大规模电磁信号识别.....张 振, 李一兵, 查浩然 (29)
- 低轨大规模卫星星座系统建模与干扰分析.....贾 敏, 孟士尧, 郭 庆, 等 (34)
- 基于时频特征的跳频信号调制识别.....张 静, 于 蕾, 侯长波, 等 (40)
- 基于电磁环境大数据的智能基站布设方法.....陈昱帆, 邵 尉, 于宝泉, 等 (47)
- 面向非合作无线网络的频谱态势预测方法.....李 高, 王 威, 李 婕, 等 (53)

太赫兹科学技术

- 真空电子器件输出窗次级电子倍增效应研究进展.....张雨婷, 崔万照 (58)
- 0.5 THz 双电子注返波管注波互作用的高频结构优化.....杨龙龙, 刘文鑫, 赵征远, 等 (67)
- 收发异源 FMCW 太赫兹系统误差分析.....刘 伟, 刘德峰, 杨 超, 等 (74)

电磁场与微波

- 宽波束宽角轴比四臂螺旋天线设计.....董 楠, 赵香妮 (80)

信号与信息处理、计算机与控制

- 基于无线传输的心电心音监护系统设计.....王 健, 赵凯明, 张会新, 等 (85)

微电子、微系统与物理电子学

- 超导单光子探测器用 1~2 K 制冷机热力学优化.....张 涛, 赵帮健, 谭 军, 等 (90)

简讯

- 第一届太赫兹科学与电子信息前沿学术研讨会第二论通知.....(n1)
- 《太赫兹科学与电子信息学报》2022 年第 5 期专栏征稿 主题: 轨道交通先进移动通信技术与应用.....(n2)
- 会讯几则.....(n3)

CONTENTS

BIG DATA MINING AND UTILIZATION OF ELECTROMAGNETIC ENVIRONMENT

Summary of research on C-V2X resource allocation methodWANG Juzhen, JIANG Hao, CHEN Qimei, et al. (1)

Information mining and association analysis based on electromagnetic environment dataLI Shuang, LIU Haipeng, GUO Lantu (8)

Modulation classification based on big data in complex environmentSHI Changli, WEI Tongzhen, WU Lixin, et al. (16)

Decentralized calculation of neural network model for electromagnetic object detectionLU Pengwei, YAN Ziyang, ZHANG Wei, et al. (22)

Large-scale electromagnetic signal recognition based on deep learningZHANG Zhen, LI Yibing, ZHA Haoran (29)

Analysis of inter-system interference of large-scale LEO satellite constellationJIA Min, MENG Shiyao, GUO Qing, et al. (34)

Frequency-hopping signal modulation recognition based on time-frequency featuresZHANG Jing, YU Lei, HOU Changbo, et al. (40)

Intelligent base station layout method based on big data of electromagnetic environmentCHEN Yufan, SHAO Wei, YU Baoquan, et al. (47)

Spectrum situation prediction for non-cooperative wireless networksLI Gao, WANG Wei, LI Jie, et al. (53)

TERAHERTZ SCIENCE AND TECHNOLOGY

Research progress of secondary electron emission effect in output window of vacuum electronic devicesZHANG Yuting, CUI Wanzhao (58)

Structure optimization and beam wave interaction of 0.5 THz rectangular grating BWO with double beamsYANG Longlong, LIU Wenxin, ZHAO Zhengyuan, et al. (67)

Error analysis for the FMCW terahertz system with different sources of transmitter and receiverLIU Wei, LIU Defeng, YANG Chao, et al. (74)

ELECTROMAGNETIC FIELDS & MICROWAVE

Design of a quadrifilar helical antenna with wide beam and wide angle axial ratioDONG Nan, ZHAO Xiangni (80)

SIGNAL AND INFORMATION PROCESSING, COMPUTER AND CONTROL

Design of ECG and PCG monitoring system based on wireless transmissionWANG Jian, ZHAO Kaiming, ZHANG Huixin, et al. (85)

MICRO-ELECTRONICS, MICRO-SYSTEM AND PHYSICAL ELECTRONICS

Thermodynamic optimizations on the 1-2 K hybrid cryocooler used for cooling Superconducting Nanowire Single Photon DetectorsZHANG Tao, ZHAO Bangjian, TAN Jun, et al. (90)