

电 讯 技 术

Dianxun Jishu

(1958 年创刊,月刊)

第 66 卷

第 5 期(总第 450 期)

2026 年 5 月 28 日

目 次

应用基础与前沿技术

- 高动态多平台高精度时频同步方法研究 王天乐,谢维成,卢建川,林竞力(701)
- 雷达-红外图像融合下的智能微弱目标检测算法 孙殿星,张一泓,彭锐晖(708)
- 面向高光谱图像分类的多维协同与中心注意网络 张丽丽,王春阳,刘佳辉,房启志(717)
- 基于多目标元启发式算法的低轨卫星波束调度优化方法 张迎希,姜大鹏,邵丰伟,武 彤,耿军平,金荣洪,陈靖峰(728)
- 一种改进 YOLOv8s 的无人机航拍目标检测方法 张 敏(737)
- RIS 辅助通信系统中的通道注意力残差网络信道估计 杨黎明,高晓敏(747)
- 基于 IRS 辅助的舰载 DFRC 系统感知性能优化方法 鲁杰龙,张贞凯,徐宝元(755)
- 可移动天线辅助 ISAC 系统的鲁棒优化 陈书恒,郝 天,郝 奇,李 雪,宋 磊,刘 贇,杨 峰(764)
- 一种用于超大规模 MIMO 下行近场信道估计的联合码本设计 郭晓金,王盛宝,宋云鹏(773)
- 一种多任务注意力联合蒸馏的调制识别方法 颜祥俊,陈奕功,刘少龙,尚志会,张 涛(782)
- 基于循环回溯寻优算法的稀疏阵列优化 余德涛,蔡晶晶,王飞翔,李文旭(791)
- 一种基于电磁地图的物理层无线入侵检测策略 张佳琪,王元杰,韩瑞昌,王红军(799)

电子与信息工程

- 复杂约束下的航天测控资源预分算法 丁 恒,肖 勇,曹祎文,张逢贵(810)
- 一种 CPU+FPGA 型通用处理资源池的资源管控技术 陈文渊,王钧慧,王英杰(819)
- 基于证据冲突及不确定性的敌我识别作战效能评估 闫善勇(829)
- 时隙状态翻转自适应水声传感器网络 MAC 协议 徐 杰,王 敏,曹冰燕,施 俊(836)
- IEEE 802.11p 标准下基于超分辨率重建的车辆通信信道估计 吕超跃,骆忠强,雷伊婷(842)
- 面向无人机载 SAR 的缝隙耦合双极化微带贴片天线 褚 发,郎 宇,欧乃铭,徐开江,章旭鑫,王吉利,陈 圳(851)
- 超大瞬时带宽矢量信号源硬件设计与性能分析 陈飞龙(858)

综述与评论

- 太空数据中心的需求分析与国外发展现状 张哲宇,李泓辛,蓝天翼,汪 夏(865)

其他

- 公益广告:中国梦唱响绿色主旋律 封二
- 稿约 封三

TELECOMMUNICATION ENGINEERING

(Monthly, Started in 1958)

Vol. 66

No. 5 (Series No. 450)

May 28, 2026

CONTENTS

Application Fundamental Research and Advanced Technology

- Research on High-precision Multi-platform Time-Frequency Synchronization Method
..... WANG Tianle, XIE Weicheng, LU Jianchuan, LIN Jingli (701)
- Radar-Infrared Image Fusion-based Intelligent Weak Target Detection Algorithm
..... SUN Dianxing, ZHANG Yihong, PENG Ruihui (708)
- Multi-dimensional Synergistic and Central Attention Network for Hyperspectral Image Classification
..... ZHANG Lili, WANG Chunyang, LIU Jiahui, FANG Qizhi (717)
- An Optimized Beam Scheduling Method for Low Earth Orbit Satellite Based on Multi-object Metaheuristic Optimization Algorithm
..... ZHANG Yingxi, JIANG Dapeng, SHAO Fengfei, WU Tong, GENG Junping, JIN Ronghong, CHEN Jingfeng (728)
- An Improved YOLOv8s-based Object Detection Method for Unmanned Aerial Vehicle Aerial Scenarios ZHANG Min (737)
- Channel Attention Residual Network for Channel Estimation in RIS-assisted Communication Systems
..... YANG Liming, GAO Xiaomin (747)
- IRS-assisted Sensing Performance Optimization Method for Shipboard Dual-function Radar and Communication (DFRC) Systems
..... LU Jielong, ZHANG Zhenkai, XU Baoxiong (755)
- Robust Optimization for Movable Antenna-assisted Integrated Sensing and Communication (ISAC) Systems
..... CHEN Shuheng, HAO Tian, HAO Qi, LI Xue, SONG Lei, LIU Yun, YANG Feng (764)
- A Joint Codebook Design for Downlink Near-field XL-MIMO Channel Estimation
..... GUO Xiaojin, WANG Shengbao, SONG Yunpeng (773)
- A Multi-task Attention Joint Knowledge Distillation Method for Modulation Recognition
..... YAN Xiangjun, CHEN Yigong, LIU Shaolong, SHANG Zhihui, ZHANG Tao (782)
- Sparse Array Optimization Based on Iterative Backtracking Optimization Algorithm
..... YU Detao, CAI Jingjing, WANG Feixiang, LI Wenxu (791)
- A Strategy of Physical-layer Wireless Intrusion Detection Based on Electromagnetic Maps
..... ZHANG Jiaqi, WANG Yuanjie, HAN Ruichang, WANG Hongjun (799)

Electronics and Information Engineering

- A Space TT&C Resource Pre-allocation Algorithm under Complex Constraints
..... DING Heng, XIAO Yong, CAO Yiwen, ZHANG Fenggui (810)
- Resource Management and Control Technology for CPU+FPGA General-purpose Processing Resource Pools
..... CHEN Wenyuan, WANG Junhui, WANG Yingjie (819)
- Operational Effectiveness Evaluation of IFF Based on Conflict and Uncertainty of Evidence YAN Shanyong (829)
- Time-slot State Flip Adaptive MAC Protocol for Underwater Acoustic Sensor Networks
..... XU Jie, WANG Min, CAO Bingyan, SHI Jun (836)
- Super-resolution Reconstruction-based Channel Estimation for Vehicular Communications under IEEE 802.11p Standard
..... LYU Chaoluo, LUO Zhongqiang, LEI Yiting (842)
- Slot-coupled Dual-polarized Microstrip Patch Antenna for UAV-borne SAR
..... CHU Fa, LANG Yu, OU Naiming, XU Kaijiang, ZHANG Xuxin, WANG Jili, CHEN Zhen (851)
- Hardware Design and Performance Analysis of a Vector Signal Generator with Ultra-wide Instantaneous Bandwidth
..... CHEN Feilong (858)

Summarization and Review

- Space Data Centers: Requirement Analysis and Overseas Development Status
..... ZHANG Zheyu, LI Hongxin, LAN Tianyi, WANG Xia (865)