

电讯技术

Dianxun Jishu

(1958 年创刊,月刊)

第 65 卷

第 6 期(总第 439 期)

2025 年 6 月 28 日

目 次

“无人机协同计算理论与关键技术”专题



- “无人机协同计算理论与关键技术”专题导读 刘树美,安毅生,施丽琴,叶迎晖,吕璐(827)
基于 RSMA 的 UAV 网络资源分配研究综述 王正强,任凯,万晓渝,樊自甫,朱小波(829)
通信感知一体化低空无人机关键技术研究综述 夏昊,林粤伟,颜军,许灵军(838)
一种能效最大化的无人机航迹强化学习优化方法 单博炜,曲佳源(848)
干扰环境下多无人机中继通信轨迹与资源联合优化 陈勇,侯颖智,王伟,陈泳,张余(855)
面向串行多任务的无人集群任务分配协同调度方法 姚昌华,顾明屹,王磊,程田圆,祁博宇(864)
UAV 辅助的非理想 STAR-RIS 认知 NOMA 物理层安全性能分析 李美玲,任康,薛凯轩,李世兴,李震(874)
无人机场景下基于联盟链的 KGC 主密钥生成协议 王钱程,朱友文,张志强(882)
UAV 辅助的 FSO 系统通感控一体化调度策略(英文) 陆定善,于印长,苏道鹏,王金元(892)
面向公平性的无人机协同轨迹优化与任务卸载 田旭,王华华,廖福建,郑少杰(903)

应用基础与前沿技术

- 基于异构知识融合的多模态虚假新闻识别 刘鑫,戴礼灿,张海瀛,王胜泽(913)
基于 CNN 的机载综合射频系统健康状态评估方法 丁宸聪(921)
基于 TDBO-XGB 模型的电离层闪烁预测方法 黎霏,孙希延,纪元法,梁文斌,嵇建波(930)

电子与信息工程

- 拒止环境下分布式平台高精度相对时差预报方法 班亚龙,康荣雷,李沛洲,常军(939)
一种低轨卫星星座跳波束对地覆盖方法 孙杰(947)
基于重构频域协方差矩阵的 DOA 估计方法 陈宝君,李学庆,鞠艳杰,王硕,李春林(953)
基于 UVM 的异构协议转换参考模型的设计与实现 樊争光,沈剑良,李智超,刘冬培(960)
一种基于背向散射通信的树叶型环境感知设备的设计 徐凌峰,王健(973)
一种 K 波段晶圆级封装器件化 R 组件设计 朱贵德,罗鑫,王军会,罗里,何小峰(980)

综述与评论

- 圆极化天线阵列设计的顺序旋转馈电技术综述 周阳,朱永忠,刘晓宇,熊豹,谢文宣(986)
北斗系统在输电线路监测中的应用综述 吴海涛,史梦梦,王鹏,靳苏喆,仲元昌(997)

其他

- “空天智能与应用”专题征稿 封二
“空天智能与应用”专题团队 封三

TELECOMMUNICATION ENGINEERING

(Monthly , Started in 1958)

Vol. 65

No. 6(Series No. 439)

June 28, 2025

CONTENTS

Special Topic on Cooperative Computing Theories and Key Technologies for UAV Swarms

- Introduction of the Special Topic on Cooperative Computing Theories and Key Technologies for UAV Swarms LIU Shumei, AN Yisheng, SHI Liqin, YE Yinghui, LYU Lu(827)
- Review of Resource Allocation in UAV Networks Based on RSMA WANG Zhengqiang, REN Kai, WAN Xiaoyu, FAN Zifu, ZHU Xiaobo(829)
- Research on Key Technologies of Low Altitude Unmanned Aerial Vehicle for Integrated Sensing and Communication;an Overview XIA Hao, LIN Yuewei, YAN Jun, XU Lingjun(838)
- A UAV Trajectory Optimization Method by Energy Efficiency Maximization Based on Reinforcement Learning SHAN Bowei, QU Jiayuan(848)
- Joint Optimization of Trajectories and Resources for Multi-UAV Relay Communications in Interference Environments CHEN Yong, HOU Yingzhi, WANG Wei, CHEN Yong, ZHANG Yu(855)
- A UAV Cluster Task Allocation and Coordination Scheduling Method for Serial Multi-tasks YAO Changhua, GU Mingyi, WANG Lei, CHENG Tianyuan, QI Boyu(864)
- Security Performance Analysis of UAV-assisted Non-ideal STAR-RIS Cognitive NOMA Physical Layer LI Meiling, REN Kang, XUE Kaixuan, LI Shixing, LI Zhen(874)
- KGC Master Key Generation Protocol Based on Consortium Blockchain for the UAV Scenario WANG Yuecheng, ZHU Youwen, ZHANG Zhiqiang(882)
- Integrated Scheduling of Communication, Sensing, and Control for UAV-aided FSO Systems LU Dingshan, YU Yinchang , SU Daopeng, WANG Jinyuan(892)
- Cooperative Trajectory Optimization and Task Offloading of UAVs for Fairness TIAN Xu, WANG Huahua, LIAO Fujian, ZHENG Shaojie(903)

Application Fundamental Research and Advanced Technology

- Multimodal Fake News Detection Based on Heterogeneous Knowledge Fusion LIU Xin, DAI Lican, ZHANG Haiying, WANG Shengze(913)
- A Health Status Assessment Method for Airborne Integrated RF System Based on CNN DING Chencong(921)
- Ionospheric Scintillation Prediction Based on TDBO-XGB Model LI Fei, SUN Xiyan, JI Yuanfa, LIANG Wenbin, JI Jianbo(930)

Electronics and Information Engineering

- High Precision Relative Clock Error Prediction in Denial Environment BAN Yalong, KANG Ronglei, LI Peizhou, CHANG Jun(939)
- A Low Earth Orbit Satellite Constellation Earth Coverage Method with Hopping Beam SUN Jie(947)
- DOA Estimation Based on Reconstructed Frequency Domain Covariance Matrix CHEN Baojun, LI Xueqing, JU Yanjie, WANG Shuo, LI Chunlin(953)
- Design and Implementation of Heterogeneous Protocol Conversion Reference Model Based on UVM FAN Zhengguanng, SHEN Jianliang, LI Zhichao, LIU Dongpei(960)
- Design of a Leaf-shaped Environmental Sensing Device Based on Backscatter Communication XU Lingfeng, WANG Jian(973)
- Design of a K-band Wafer-level Package Rx Module ZHU Guide, LUO Xin, WANG Junhui, LUO Li, HE Xiaofeng(980)

Summarization and Review

- A Review of Sequential Rotation Feeding Techniques for Circularly Polarized Antenna Array Design ZHOU Yang, ZHU Yongzhong , LIU Xiaoyu, XIONG Bao, XIE Wenxuan(986)
- Applications of BeiDou System in Transmission Line Monitoring;an Overview WU Haitao, SHI Mengmeng, WANG Peng, JIN Suzhe, ZHONG Yuanchang(997)