

美国工程索引 (EI) 核心数据库收录期刊
中国科技期刊卓越行动计划入选期刊

ISSN 1000-436X
CODEN TOXUDB
CN 11-2102/TN

通信学报

Journal on Communications

第 43 卷第 7 期 Vol. 43 No. 7 | 2022 年 7 月 Jul. 2022



中国通信学会主办

A Publication of China Institute of Communications

中国 · 北京 Beijing, China

通 信 学 报

第 43 卷第 7 期 2022 年 7 月

目 次

学术论文

面向通信-导航-感知一体化的应急无人机网络低能耗部署研究	
.....王 莉, 魏 青, 徐连明, 沈 渊, 张 平, 费爱国 [2022138](1)	
基于主被动波束成形联合优化的双 RIS 辅助抗干扰通信方法	
.....郭海燕, 杨 震, 邹玉龙, 吕 斌, 冯蕴天, 赵玉娟 [2022144](21)	
光子防火墙中 42 Gbit/s BPSK 信号 4 位全光模式匹配系统及实验验证	
.....张琦涵, 巩小雪, 李 瑞, 李 新, 黄善国, 郭 磊 [2022141](31)	
改进的减轮 Kiasu-BC 算法的中间相遇攻击	李曼曼, 陈少真 [2022112](41)
面向轻量级物联网设备的高效匿名身份认证协议设计	王振宇, 郭 阳, 李少青, 侯 申, 邓 丁 [2022125](49)
边缘环境下基于无证书公钥密码的数据完整性审计方案	王子园, 杜瑞忠 [2022130](62)
基于图神经网络的联合用户调度与波束成形优化算法	何世文, 袁 军, 安振宇, 张 敏, 黄永明, 张尧学 [2022133](73)
融合 Focal Loss 的网络威胁情报实体抽取	郭渊博, 李勇飞, 陈庆礼, 方 晨, 胡阳阳 [2022132](85)
高机动目标跟踪 ATPM-IMM 算法	曾 浩, 母王强, 杨顺平 [2022135](93)
VR 全景视频时空切片传输的流量评估与建模	韩圣千, 娄 函, 王君来[2022139](102)
基于停放车辆路边单元环境感知的车联网资源高效分配	
.....秦 鹏, 和昊婷, 赵雄文, 伏 阳, 张 钰, 王 淼, 王 硕, 武 雪[2022129](113)	
基于全体圈个数为 4 的 LFSR 构造 de Bruijn 序列的研究	周琮伟, 胡 斌, 关 杰[2022108](126)
基于轻量化分布式学习的自动调制分类方法	杨 洁, 董 标, 付 雪, 王 禹, 桂 冠[2022145](134)
面向视角非对齐数据的多视角聚类方法	李 鹭, 冯 聪, 牛宇童, 徐士彪, 张英涛, 孙广路[2022134](143)
基于语义融合的域内相似性分组行人重识别	寇旗旗, 黄 绩, 程德强, 李云龙, 张剑英[2022136](153)
基于正样本对比与掩蔽重建的自监督语音表示学习	张文林, 刘雪鹏, 牛 铜, 陈 琦, 屈 丹[2022142](163)

综 述

基于系统溯源图的威胁发现与取证分析综述	
.....冷 涛, 蔡利君, 于爱民, 朱子元, 马建刚, 李超飞, 牛瑞丞, 孟 丹[2022105](172)	
6G 移动网络关键技术	张海君, 陈安琪, 李亚博, 隆克平[2022140](189)

学术通信

面向调控信息新鲜度保障的电力至简物联网资源优化	
.....廖海君, 贾泽晗, 周振宇, 刘 念, 王 飞, 甘 忠, 姚贤炯[2022124](203)	
基于特征深度融合的 Web 服务 QoS 联合预测	刘建勋, 丁领航, 康国胜, 曹步清, 肖 勇[2022107](215)

Journal on Communications

Vol.43 No.7 July 2022

Contents

Papers

- Research on low-energy-consumption deployment of emergency UAV network for integrated communication-navigating-sensing *WANG Li, WEI Qing, XU Lianming, SHEN Yuan, ZHANG Ping, FEI Aiguo* [2022138](1)
- Double-RIS assisted anti-jamming communication method based on joint active and passive beamforming optimization *GUO Haiyan, YANG Zhen, ZOU Yulong, LYU Bin, FENG Yuntian, ZHAO Yujuan* [2022144](21)
- All-optical pattern matching system of 42 Gbit/s 4-bit BPSK signals and its demonstration for optoelectronic firewall *ZHANG Qihan, GONG Xiaoxue, LI Rui, LI Xin, HUANG Shanguo, GUO Lei* [2022141](31)
- Improved meet-in-the-middle attack on reduced-round Kiasu-BC algorithm *LI Manman, CHEN Shaozhen* [2022112](41)
- Design of efficient anonymous identity authentication protocol for lightweight IoT devices *WANG Zhenyu, GUO Yang, LI Shaoqing, HOU Shen, DENG Ding* [2022125](49)
- Certificateless public key cryptography based provable data possession scheme in edge environment *WANG Ziyuan, DU Ruizhong* [2022130](62)
- GNN-based optimization algorithm for joint user scheduling and beamforming *HE Shiwen, YUAN Jun, AN Zhenyu, ZHANG Min, HUANG Yongming, ZHANG Yaoyue* [2022133](73)
- Fusion of Focal Loss's cyber threat intelligence entity extraction *GUO Yuanbo, LI Yongfei, CHEN Qingli, FANG Chen, HU Yangyang* [2022132](85)
- High maneuvering target tracking ATPM-IMM algorithm *ZENG Hao, MU Wangqiang, YANG Shunping* [2022135](93)
- Traffic evaluation and modeling for spatio-temporal slicing based VR panoramic video transmission *HAN Shengqian, LOU Han, WANG Junlai*[2022139](102)
- Efficient resource allocation with context-awareness for packed car road side unit-based Internet of vehicles *QIN Peng, HE Haoting, ZHAO Xiongwen, FU Yang, ZHANG Yu, WANG Miao, WANG Shuo, WU Xue*[2022129](113)
- Construction de Bruijn sequence based on whole LFSR with 4 cycles *ZHOU Congwei, HU Bin, GUAN Jie*[2022108](126)
- Lightweight decentralized learning-based automatic modulation classification method *YANG Jie, DONG Biao, FU Xue, WANG Yu, GUI Guan*[2022145](134)
- Multiview clustering method for view-unaligned data *LI Ao, FENG Cong, NIU Yutong, XU Shibiao, ZHANG Yingtao, SUN Guanglu*[2022134](143)
- Person re-identification with intra-domain similarity grouping based on semantic fusion *KOU Qiqi, HUANG Ji, CHENG Deqiang, LI Yunlong, ZHANG Jianying*[2022136](153)
- Self-supervised speech representation learning based on positive sample comparison and masking reconstruction *ZHANG Wenlin, LIU Xuepeng, NIU Tong, CHEN Qi, QU Dan*[2022142](163)

Comprehensive Reviews

- Review of threat discovery and forensic analysis based on system provenance graph *LENG Tao, CAI Lijun, YU Aimin, ZHU Ziyuan, MA Jian'gang, LI Chaofei, NIU Ruicheng, MENG Dan*[2022105](172)
- Key technologies of 6G mobile network *ZHANG Haijun, CHEN Anqi, LI Yabo, LONG Keping*[2022140](189)

Correspondences

- Dispatching and control information freshness guaranteed resource optimization in simplified power Internet of things *LIAO Haijun, JIA Zehan, ZHOU Zhenyu, LIU Nian, WANG Fei, GAN Zhong, YAO Xianjiong*[2022124](203)
- Joint QoS prediction for Web services based on deep fusion of features *LIU Jianxun, DING Linghang, KANG Guosheng, CAO Buqing, XIAO Yong*[2022107](215)