

Q K 1 7 3 3 9 2 1

全国中文核心期刊（2004版）
工信部2009-2010年度科技期刊规范化优秀奖
《中国学术期刊影响因子年报》统计源期刊

通信技术

Communications Technology

2017 2017年10月 第50卷
第10期 总第310期

ISSN 1002-0802



欢迎扫码

9 771002 080178 ISSN 1002-0802 CN51-1167/TN

邮发代号：62-304

万方数据

通信技术

Tongxin Jishu

(1967 年创刊, 月刊)

第 50 卷 第 10 期(总第 310 期)

2017 年 10 月

目 次

综 述

- 全双工中继协作通信的关键技术研究综述 钟智坚, 崔海霞 (2137)
协作干扰管理技术研究综述 鞠晓杰, 李 璞, 王 雪, 申庆丰 (2144)

信息处理与传输

- 基于 TD-LTE 的隧道无线传播模型校正研究 徐亚顺, 刘晓娟 (2150)
一种新的陆地移动卫星通信信道模型 张鏖峰 (2158)
一种协作 OFDM 系统频偏与信道联合估计算法 鲍晶晶, 董华锋 (2162)
低信噪比高动态下基于卡尔曼滤波的码辅助载波同步算法 杨 杰, 李广侠, 朱宏鹏, 李飞龙 (2167)
极化码在 BEC 信道下的性能分析 崔冰清, 褚丽莉, 孙国栋 (2172)
基于双同步结构的混沌键控调制方法 赵柏山, 张 帆 (2178)
ADS-B 二重交织信号时域分离算法 吴 杰, 郭建华, 蒋 凯, 高 勇 (2184)
一种基于最优逼近准则的扩频码盲估计方法研究 熊 刚, 胡宗恺, 蒋天瑜, 刘 丹 (2190)
基于 USRP 的干扰信号感知与预测研究 吴楚捷, 程云鹏, 丁国如, 张 静, 孙佳琛 (2195)
水下无线光通信关键技术应用研究 易丛琴, 周汝雁 (2202)
核集员双归一化最小平均 p 范数算法 赵知劲, 张笑菲 (2206)
整数分解量子算法 王平平, 陆正福, 杨春尧, 李 军 (2212)
基于等效源法对移动声源辐射声场的重建与识别研究 李 岩, 王亚芳, 蔡 畅, 苗兵梅 (2218)
基于 Kalman 滤波的 Chan 室内定位算法改进 仲江涛, 秦 斌, 吴健春, 刘 童 (2223)
改进型 LTP 纹理颜色直方图用于非刚体跟踪 王香莲, 张正平, 龚 红, 秦 莉 (2229)
一种基于 Canny 的边缘检测改进算法 文 章, 张 欣, 周昌顺, 张 良 (2236)
基于脉冲耦合神经网络和二维熵的图像自适应分割 张平康, 张 欣, 李 琪, 张 航 (2241)

网络与系统

- 大规模 MIMO TDD 系统信道互易性研究 邢移单 (2245)
多小区 Massive MIMO 系统低复杂度 ZF 线性检测算法 张瑞欣, 曹海燕, 谢时场, 王秀敏 (2250)

- 基于能效的多用户 Massive MIMO 天线选择技术研究 刘世美, 刘紫燕, 唐虎 (2255)
干扰条件下全双工中继网络的中断分析 张伟, 芮贤义 (2262)
基于模糊逻辑的 GEO 多波束卫星移动通信系统切换策略研究 王继业, 喻火根 (2266)
低轨卫星通信系统链路层设计 胡煜雪, 张勇, 郭达, 李海昊 (2274)
车载自组网的单层与跨层路由协议研究 张一宸, 王海, 彭来献 (2279)
基于信道有限状态信息实现延迟受限的无线多跳网的传输调度研究 宋勇, 席伟, 戴纳 (2285)
小蜂窝网络优势、面临挑战与发展趋势 李春红 (2290)
基于平流层通信技术的军事通信网络研究 王翔, 何炜 (2295)
基于实时装备态势信息的通信对抗干扰训练效能客观评价方法 宋远达, 储飞黄, 李建强 (2299)

安全与保密

- 基于 Tor 的暗网空间资源探测 杨溢, 郭晗, 王轶骏, 薛质 (2304)
基于用户画像的异常行为检测 朱佳俊, 陈功, 施勇, 薛质 (2310)
基于 LEACH 路由协议的数字水印节点认证安全技术研究 刘伟, 秦斌, 刘童, 程亮 (2316)
SOHO 路由器后门分析与检测研究综述 谭云木, 王轶骏, 薛质 (2324)
一种基于视频码流的视频水印方案 柳娜, 裴静, 王冰洋, 马莉 (2333)
基于可信计算及 SGX 的软件保护方法 黄冬, 李业旺, 郑驰 (2340)
云计算环境下用户信息安全防护研究 谭彬 (2345)
面向网络空间的攻防靶场设计 吴怡晨, 王轶骏, 薛质 (2349)

工程与应用

- 基于无线传感器网络的船载机房环境监测系统设计 吕金华, 赵乾宏, 孙文杰, 刘明波 (2357)
一种新型单极子 GNSS 天线的设计 张奥运, 张忠祥, 余文胜, 吴先良 (2362)
IP 卫星网络接入网关中队列管理器的设计与实现 武东明, 乔庐峰, 陈庆华 (2366)
多协议多维度查找电路的设计与实现 陈勇, 乔庐峰, 陈庆华, 付长洲 (2372)
WDRR 网络业务流生成调度电路的研究与实现 付长洲, 乔庐峰, 陈庆华, 陈勇 (2379)
一种新型网络隔离单向传输设备的设计与实现 程军 (2385)

其他

- 征稿启事 (封三)

COMMUNICATIONS TECHNOLOGY

(Monthly, Started in 1967)

Vol.50

No.10

(Series No.310)

Oct.2017

CONTENTS

Technical Overview

- A Summary of Key Techniques for Full-duplex Collaborative Communication ZHONG Zhi-jian, CUI Hai-xia (2137)
Overview on Cooperative Interference Management Technology JU Xiao-jie, LI Pu, WANG Xue, SHEN Qing-feng (2144)

Information Processing & Transmission

- Correction of Tunnel Radio Propagation Model based on TD-LTE XU Ya-shun, LIU Xiao-juan (2150)
Novel Channel Model of Land Mobile Satellite Communication ZHANG Ao-feng (2158)
Joint Estimation Algorithm for Frequency-offset and Channel of Cooperative OFDM System BAO Jing-jing, DONG Hua-feng (2162)
Code-aided Carrier Synchronization Algorithm based on Kalman Filter at Low SNR and in High Dynamic Environment YANG Jie, LI Guang-xia, ZHU Hong-peng, LI Fei-long (2167)
Performance Analysis of Polarization Codes in BEC Channel CUI Bing-qing, CHU Li-li, SUN Guo-dong (2172)
Chaos Shift-Keying Modulation Method based on Dual Synchronization Structure ZHAO Bai-shan, ZHANG Fan (2178)
ADS-B Double Intertwined Signal Separation Algorithm in Time Domain WU Jie, GUO Jian-hua, JIANG Kai, GAO Yong (2184)
Blind Estimation of Spread-Spectrum Code based on Near-Optimal Criterion XIONG Gang, Hu Zong-kai, JIANG Tian-yu, LIU Dan (2190)
Spectrum Sensing and Prediction of Jamming Signal based on USRP WU Chu-jie, CHENG Yun-peng, DING Guo-ru, ZHANG Jing, SUN Jia-chen (2195)
Key Technology Application of Underwater Wireless Optical Communication System YI Cong-qin, ZHOU Ru-yan (2202)
Kernel Set-membership Bi-normalized Least Mean p-norm Algorithm ZHAO Zhi-jin, ZHANG Xiao-fei (2206)
Analysis and Optimization of Shor Quantum Algorithm WANG Ping-ping, LU Zheng-fu, YANG Chun-yao, LI Jun (2212)
Reconstruction and Recognition of Moving-Source Radiated Sound Field based on Equivalent Source Method LI Yan, WANG Ya-fang, CAI Chang, MIAO Bing-mei (2218)
Modified Chan In-door Positioning Algorithm based on Kalman Filter ZHONG Jiang-tao, QIN Bin, WU Jian-chun, LIU Tong (2223)
Modified LTP Texture Color Histogram for Non-rigid Tracking WANG Xiang-lian, ZHANG Zheng-ping, GONG Hong, QIN Li (2229)
Modified Edge Detection Algorithm based on Canny WEN Zhang, ZHANG Xin, ZHOU Chang-shun, ZHANG Liang (2236)
Adaptive Segmentation of Image based on Pulse-Coupled Neural Network and Two-dimensional Entropy ZHANG Ping-kang, ZHANG Xin, LI Qi, ZHANG Hang (2241)

Network & System

- Channel Reciprocity of Massive MIMO TDD System XING Yi-dan (2245)
Low-Complexity ZF Linear Detection Algorithm for Multi-Cell Massive MIMO System ZHANG Rui-xin, CAO Hai-yan, XIE Shi-yi, WANG Xiu-min (2250)

Energy Efficiency-based Antenna Selection in Multi-user Massive MIMO System	LIU Shi-mei, LIU Zi-yan, TANG Hu (2255)
Outage Analysis of Full-duplex Relay Networks with Interference	ZHANG Wei, RUI Xian-yi (2262)
Research of Spotbeam Handoff Strategy based on Fuzzy Logic for GEO Multi-beam Satellite Mobile Communication System	WANG Ji-ye, YU Huo-gen (2266)
Design of Link Layer for LEO Satellite Communication System	HU Yu-xue, ZHANG Yong, GUO Da LI Hai-hao(2274)
Single-layer and Cross-layer Routing Protocols in Vehicular Ad-hoc Networks.....	ZHANG Yi-chen, WANG Hai, PENG Lai-xian (2279)
Finite Channel State Information-based Transmission Scheduling in Delay-Constrained Multi-hop Wireless Networks	SONG Yong, XI Wei, JI Na (2285)
Advantages, Challenges and Development Trends of Small-Cell Networks	LI Chun-hong (2290)
Military Communication Network based on Stratospheric Communication Technology	WANG Xiang, HE Wei (2295)
Objective Evaluation Method for Communication-Countermeasure Interference Training Efficiency based on Real-time Information of Equipment Status.....	SONG Yuan-da, CHU Fei-huang, LI Jian-qiang (2299)

Security & Privacy

Darknet Resource Exploring based on Tor	YANG Yi, GUO Han, WANG Yi-jun, XUE Zhi (2304)
Abnormal Behavior Detection based on User Profile	ZHU Jia-jun, CHEN Gong, SHI Yong, XUE Zhi (2310)
Authentication Technology of Digital Watermarking Node based on LEACH Routing Protocol	LIU Wei, QIN Bin, LIU Tong, CHENG Liang (2316)
Analysis and Detection of SOHO Router Backdoor	TAN Yun-mu, WANG Yi-jun, XUE Zhi (2324)
Video Watermarking based on Video Code Stream	LIU Na, PEI Jing, WANG Bing-yang, MA Li (2333)
Software Protection based on Trusted Computing and SGX	HUANG Dong, LI Ye-wang, ZHENG Chi (2340)
User Information Security Protection in Cloud Computing Environment	TAN Bin (2345)
Design and Research on Construction of Cyber Range.....	WU Yi-chen, WANG Yi-jun, XUE Zhi (2349)

Engineering & Application

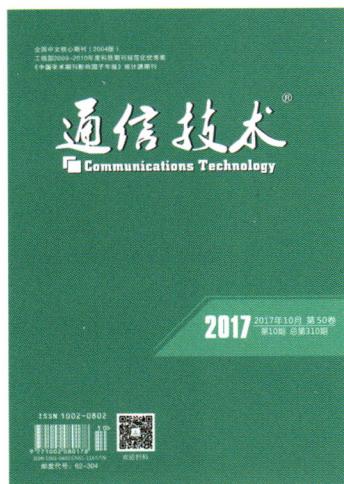
Design of Environment Monitoring System for Ship-Borne Computer Room based on Wireless Sensor Network	LV Jin-hua, ZHAO Qian-hong, SUN Wen-jie, LIU Ming-bo (2357)
Design of Novel Monopole Antenna for GNSS	ZHANG Ao-yun, ZHANG Zhong-xiang, YU Wen-sheng, WU Xian-liang (2362)
Design and Implementation of Queue Manager for Access Gateway in IP Satellite Network	WU Dong-ming, QIAO Lu-feng, CHEN Qing-hua (2366)
Design and Implementation of Multi-protocol Multi-dimensional Search Circuit	CHEN Yong, QIAO Lu-feng, CHEN Qing-hua, FU Chang-zhou (2372)
Scheduling-Circuit Implementation of Internet Traffic Generation based on WDRR	FU Chang-zhou, QIAO Lu-feng, CHEN Qing-hua, CHEN Yong (2379)
Design and Implementation of Novel Network-Isolation and Unidirectional Transmission Equipment	CHENG Jun (2385)

Miscellaneous

Contributions Invited	(Inside Back Cover)
-----------------------------	---------------------

1967年创刊

专业 专注 权威 2017



邮发代号: **62-304**
全年定价**240元** (含邮资)

订阅方式:

1. 邮局汇款: 四川成都高新区创业路8号 (610041)

《通信技术》编辑部

2. 银行汇款: 开户行: 交通银行股份有限公司成都创业路支行

开户名: 四川信息安全与通信保密杂志社

账 号: 511610015010149182009

电话: 028-85169918 / 85151528

定价: 20元/册