

目 次

5G 移动通信专刊

编者按..... 1

王东明, 张钦宇, 武刚, 尤肖虎

评述

面向 5G 的大规模天线无线传输理论与技术..... 3

王东明, 张余, 魏浩, 尤肖虎, 高西奇, 王江舟

论文

异构网中能效最优的小站部署方案..... 22

范建存, 任琦, 罗新民, 徐志昆

多层异构蜂窝网协作传输和协作干扰机制的安全性能分析..... 33

钟智豪, 罗文字, 彭建华, 黄开枝

基于 CSI-RS 赋形的大规模天线阵列预编码与反馈方法..... 49

陈文洪, 高秋彬, 陈润华, 李辉, Tamrakar RAKESH, 孙韶辉

分布式大规模 MIMO 系统中迭代坐标下降互易性校准算法..... 61

魏浩, 王东明, 尤肖虎

基于循环前缀的滤波多音技术方案..... 75

彭琴, 卞鑫, 钱国明, 芮赞

基于 3D-Markov 链的异构网络用户 QoE 分析方法..... 85

张祖凡, 张宇

无线芯片域网络自适应多址接入方案..... 100

李兴华, 张永斌, 王宜文

Nakagami- $m$  衰落信道下全双工解码转发中继选择策略研究..... 111

王雨榕, 徐友云, 朱磊, 许魁, 沈先丽

Contents

**Special Issue on 5G Wireless Communication**

Editor's Note ..... 1  
Dongming WANG, Qinyu ZHANG, Gang WU & Xiaohu YOU

**REVIEW**

An overview of transmission theory and techniques of large-scale antenna systems for 5G wireless communications ..... 3  
Dongming WANG, Yu ZHANG, Hao WEI, Xiaohu YOU, Xiqi GAO & Jiangzhou WANG

**RESEARCH PAPER**

High-energy efficient deployment scheme of small base stations for heterogeneous network ..... 22  
Jiancun FAN, Qi REN, Xinmin LUO & Zhikun XU

Secrecy performance analysis of cooperative transmission and cooperative jamming for multi-tier heterogeneous cellular networks ..... 33  
Zhihao ZHONG, Wenyu LUO, Jianhua PENG & Kaizhi HUANG

Precoding and feedback for massive MIMO via beamformed CSI-RS ..... 49  
Wenhong CHEN, Qiubin GAO, Runhua CHEN, Hui LI, Tamrakar RAKESH & Shaohui SUN

Iterative coordinate descent reciprocity calibration for distributed large-scale MIMO systems with block diagonalization precoding ..... 61  
Hao WEI, Dongming WANG & Xiaohu YOU

Cyclic prefix filtered multitone modulation ..... 75  
Qin PENG, Xin BIAN, Guoming QIAN & Yun RUI

QoE analysis method for heterogeneous network user based on 3D-Markov chain ..... 85  
Zufan ZHANG & Yu ZHANG

A novel adaptive multiple-access scheme for wireless chip area network ..... 100  
Xuehua LI, Yongbin ZHANG & Yiwen WANG

On the relay selection scheme for full-duplex DF relaying over Nakagami- $m$  fading channels ..... 111  
Yurong WANG, Youyun XU, Lei ZHU, Kui XU & Xianli SHEN