

目次

学术论文

基于移动节点的无线传感器网络覆盖洞修复方法..... 王良民, 李 菲, 秦 颖 (1)

无线自组织网络动态拓扑特性的排队理论建模与分析..... 覃光成, 杨盘隆, 田 畅, 陈 强, 尹 浩 (9)

5 元 1 阶弹性函数的代数免疫阶..... 杜 蛟, 温巧燕, 张 劫, 宋守超 (17)

基于角点特征的几何同步数字水印算法..... 刘 全, 张 乐, 张永刚, Christian Bessiere, 傅启明, 王晓燕 (25)

关于单位成本信道容量的注记..... 田大钢 (32)

无线网络中兼顾业务类型及公平性的无线资源共享问题研究..... 惠蕾放, 李建东, 肖丽媛, 丁汉清 (39)

基于 EMD 及 ARMA 的自相似网络流量预测..... 高 波, 张钦宇, 梁永生, 刘宁宁, 黄程波, 张乃通 (47)

动态均衡的 LB-BvN 分组保序调度机制..... 扈红超, 郭云飞, 庞 琳, 卜佑军 (57)

基于通信特征和 D-S 证据理论分析僵尸网络相似度..... 臧天宁, 云晓春, 张永铮, 门朝光, 崔 翔 (66)

基于细菌群体趋药性的有序盲信号分离算法..... 陈 雷, 张立毅, 郭艳菊, 赵俊青, 李 锦 (77)

基于改进 Elman 网络模型的软件可靠性预测..... 程绪超, 陈新宇, 郭 平 (86)

技术报告

抗 DoS 攻击的多用户传感器网络广播认证方案..... 郭江鸿, 马建峰 (94)

无感知分组丢失下的无线传感器网络链路质量评估模型..... 舒 坚, 刘琳岚, 樊佑磊, 李 君 (103)

基于混合核函数的分布式信息检索结果融合..... 王秀红, 鞠时光 (112)

宽带接收机前端非线性的盲辨识与数字后补偿方法..... 彭 隼, 马 洪, 金 江, 胡 啸, 彭 亮, 张 辉, 郭妩君 (119)

基于多信道预约的传感器网络 MAC 协议研究..... 张德升, 李金宝, 郭龙江 (126)

多 IDS 环境中基于可信度的警报关联方法研究..... 梅海彬, 龚 俭 (138)

短 文

基于射频前端的动态频谱共享无线通信系统工作信道选择分析..... 游长江, 朱晓维, 柳 靖, 张晓东 (147)

改进的基于小波变换和 FARIMA 模型的网络流量预测算法..... 陈晓天, 刘静娴 (153)

高速低功耗深度报文检测方法..... 朱国胜, 余少华 (158)

基于 Markov 过程的渲染集群可用性分析..... 洪志国, 王永滨, 石民勇 (166)

# Journal on Communications

Vol.32 No.4 April 2011

## Contents

### Papers

- Resilient method for recovering coverage holes of wireless sensor networks by using mobile nodes .....  
..... *WANG Liang-min, LI Fei, QIN Ying* ( 1 )
- Characterizing the topology dynamics in mobile ad hoc networks: modeling and analyzing techniques using the queuing theory .....  
..... *QIN Guang-cheng, YANG Pan-long, TIAN Chang, CHEN Qiang, YIN Hao* ( 9 )
- On the algebraic immunity for 1st-resilience Boolean functions with five variables .....  
..... *DU Jiao, WEN Qiao-yan, ZHANG Jie, SONG Shou-chao* (17)
- Geometrically synchronous watermarking algorithm based on the corner feature .....  
..... *LIU Quan, ZHANG Le, ZHANG Yong-gang, Christian Bessiere, FU Qi-ming, WANG Xiao-yan* (25)
- Notes on channel capacity per unit cost ..... *TIAN Da-gang* (32)
- Radio resource sharing for wireless networks with traffic type and fairness consideration .....  
..... *HUI Lei-fang, LI Jian-dong, XIAO Li-yuan, DING Han-qing* (39)
- Predicting self-similar networking traffic based on EMD and ARMA .....  
..... *GAO Bo, ZHANG Qin-yu, LIANG Yong-sheng, LIU Ning-ning, HUANG Cheng-bo, ZHANG Nai-tong* (47)
- Dynamic traffic balancing scheme for LB-BvN to guarantee in-order packet delivering .....  
..... *HU Hong-chao, GUO Yun-fei, PANG lin, BU You-jun* (57)
- Botnets' similarity analysis based on communication features and D-S evidence theory .....  
..... *ZANG Tian-ning, YUN Xiao-chun, ZHANG Yong-zheng, MEN Chao-guang, CUI Xiang* (66)
- Sequential blind signal separation algorithm based on bacterial colony chemotaxis .....  
..... *CHEN Lei, ZHANG Li-yi, GUO Yan-ju, ZHAO Jun-qing, LI Qiang* (77)
- Software reliability prediction with an improved Elman network model ..... *CHENG Xu-chao, CHEN Xin-yu, GUO Ping* (86)

### Technical Reports

- Multi-user broadcast authentication scheme in wireless sensor networks with defending against DoS attacks .....  
..... *GUO Jiang-hong, MA Jian-feng* (94)
- Link quality estimation model for wireless sensor networks under non-perceived packet loss .....  
..... *SHU Jian, LIU Lin-lan, FAN You-lei, LI Jun*(103)
- Result merging method based on combined kernels for distributed information retrieval ..... *WANG Xiu-hong, JU Shi-guang*(112)
- Blind identification and digital calibration method of broadband receiver front-end nonlinearity .....  
..... *PENG Jun, MA Hong, JIN Jiang, HU Xiao, PENG Liang, ZHANG Hui, GUO Wu-Jun*(119)
- Study on multi-channel reservation based MAC protocol for sensor networks .....  
..... *ZHANG De-sheng, LI Jin-bao, GUO Long-jiang*(126)
- Research on alert correlation method based on alert confidence in multi-IDS environment ..... *MEI Hai-bin, GONG Jian*(138)

### Concise Papers

- Analysis of operational channel selection of dynamic spectrum sharing wireless communication system based on RF front-end .....  
..... *YOU Chang-jiang, ZHU Xiao-wei, LIU Jing, ZHANG Xiao-dong*(147)
- Network traffic prediction based on wavelet transformation and FARIIMA ..... *CHEN Xiao-tian, LIU Jing-xian*(153)
- High speed deep packet inspection method with low power dissipation ..... *ZHU Guo-sheng, YU Shao-hua*(158)
- Markov-based availability analysis of clusters for distributed rendering system .....  
..... *HONG Zhi-guo, WANG Yong-bin, SHI Min-yong*(166)