

EI数据库收录期刊  
第41卷 第9期  
Vol.41 No.9

ISSN 1009-5896  
CODEN DKXUEC  
CN 11-4494/TN

# 电子与信息学报

JOURNAL OF ELECTRONICS & INFORMATION TECHNOLOGY

2019

9



中国科学院电子学研究所  
国家自然科学基金委员会信息科学部

主办

科学出版社

# 电子与信息学报

DIANZI YU XINXI XUEBAO

第 41 卷 第 9 期

2019 年 9 月

## 目 次

### 论 文

- 同时同频扰中通系统非线性干扰抑制 ..... 李晨兴, 郭文博, 刘颖, 沈莹, 赵宏志, 唐友喜 (2033)
- 基于非正交多址接入的网络切片联合用户关联和功率分配算法 .....  
..... 唐伦, 马润琳, 杨恒, 陈前斌 (2039)
- 基于分段Walsh-Hadamard变换的卷积码盲重构算法 .....  
..... 姚智刚, 解辉, 韩壮志, 史林, 尹园威 (2047)
- 短参考正交多用户差分混沌键控方案的性能分析 ..... 张刚, 赵畅畅, 张天骥 (2055)
- 低信噪比下归零 Turbo 码码长及其帧同步识别 .....  
..... 吴昭军, 张立民, 钟兆根, 于柯远, 杨芸丞 (2063)
- 5G 网络切片场景中基于预测的虚拟网络功能动态部署算法 .....  
..... 唐伦, 周钰, 杨友超, 赵国繁, 陈前斌 (2071)
- 基于 5G 接入网络的多优先级虚拟网络功能迁移开销与网络能耗联合优化算法 .....  
..... 唐伦, 杨恒, 马润琳, 陈前斌 (2079)
- 声表面波谐振器回波信号的频率估计 ..... 刘伯权, 郭佳佳, 罗治民 (2087)
- 宽带低 RCS 超表面天线阵设计 ..... 刘涛, 曹祥玉, 高军, 兰俊祥, 丛丽丽 (2095)
- 雷电测向正交磁环天线的测角误差校正 .....  
..... 胡淼, 阮泽辉, 李鹏, 曹保锋, 周雪芳, 孙佳琦, 胡喜明, 叶晟 (2103)
- 合成多频磁感应信号同步激励-检测方法研究 ..... 杜强, 张可昊, 柯丽, 王晨阳 (2108)
- 基于空时内插的端射阵机载雷达杂波补偿新方法 ..... 李永伟, 谢文冲 (2115)
- 基于 LTE 信号的外辐射源雷达同频基站干扰抑制方法研究 .....  
..... 吕晓德, 张汉良, 刘忠胜, 孙正豪, 刘平羽 (2123)
- 基于序列优化的认知雷达稳健旁瓣抑制方法 ..... 金松坡, 庄珊珊 (2131)
- 一种二维信号波达方向估计的改进多重信号分类算法 ..... 王旭东, 仲倩, 闫贺, 张迪 (2137)
- 基于原子范数的 MIMO 雷达发射波形设计方法 .....  
..... 庞晓娇, 赵永波, 徐保庆, 曹成虎, 索之玲 (2143)
- 一类新的周期为  $2p^m$  的  $q$  阶二元广义分圆序列的线性复杂度 .....  
..... 王艳, 薛改娜, 李顺波, 惠飞飞 (2151)
- 减轮 Simeck 算法的积分攻击 ..... 任炯炯, 李航, 陈少真 (2156)
- 一种侧信道风险感知的虚拟节点迁移方法 ..... 黄开枝, 潘启润, 袁泉, 游伟 (2164)
- 基于属性攻击图的动态威胁跟踪与量化分析技术研究 .....  
..... 杨英杰, 冷强, 潘瑞莹, 胡浩 (2172)
- 抗关键词猜测的授权可搜索加密方案 ..... 曹素珍, 郎晓丽, 刘祥震, 张玉磊, 王斐 (2180)
- 基于深度堆栈编码器和反向传播算法的网络安全态势要素识别 ..... 寇广, 王硕, 张达 (2187)
- 基于模型重建的深度卷积网络权值可视化方法 ..... 刘嘉铭, 邢孟道, 符吉祥, 徐丹 (2194)

基于马尔科夫决策过程的多传感器协同检测与跟踪调度方法 .....	徐公国, 单甘霖, 段修生, 乔成林, 王浩天	(2201)
基于无迹卡尔曼滤波的 iBeacon/INS 数据融合定位算法 .....	王守华, 陆明炽, 孙希延, 纪元法, 胡丁梅	(2209)
分块压缩感知的全变差正则化重构算法 .....	湛德荣, 吕海波, 李秋富, 宫久路, 厉智强, 韩肖君	(2217)
基于优化的极限学习机和深度层次的 RGB-D 显著检测 .....	刘政怡, 徐天泽	(2224)
超复数域小波变换的显著性检测.....	余 映, 吴青龙, 邵凯旋, 康迂星, 杨 鉴	(2231)
基于行人属性分级识别的行人再识别 .....	陈鸿昶, 吴彦丞, 李邵梅, 高 超	(2239)
基于双模板 Siamese 网络的鲁棒视觉跟踪算法 .....	侯志强, 陈立琳, 余旺盛, 马素刚, 范九伦	(2247)
基于双向门控循环单元的 3D 人体运动预测 .....	桑海峰, 陈紫珍	(2256)
基于脑电信号深度迁移学习的驾驶疲劳检测 .....	王 斐, 吴仕超, 刘少林, 张亚徽, 魏 颖	(2264)
基于整合移动平均自回归和遗传粒子群优化小波神经网络组合模型的交通流预测 .....	殷礼胜, 唐圣期, 李 胜, 何怡刚	(2273)
离散动力系统无退化-配置 $N$ 个正 Lyapunov 指数 .....	赵 耿, 李 红, 马英杰, 秦晓宏	(2280)

# JOURNAL OF ELECTRONICS & INFORMATION TECHNOLOGY

Vol.41 No.9 Sep. 2019

## CONTENTS

### Papers

- Nonlinear Distortion Suppression in Cooperative Jamming Cancellation System .....  
..... *LI Chenxing, GUO Wenbo, LIU Ying, SHEN Ying, ZHAO Hongzhi, TANG Youxi* (2033)
- Joint User Association and Power Allocation Algorithm for Network Slicing Based on NOMA .....  
..... *TANG Lun, MA Runlin, YANG Heng, CHEN Qianbin* (2039)
- Blind Reconstruction of Convolutional Code Based on Partitioned Walsh-Hadamard Transform .....  
..... *YAO Zhigang, XIE Hui, HAN Zhuangzhi, SHI Lin, YIN Yuanwei* (2047)
- Performance Analysis of Short Reference Orthogonal Multiuser Differential Chaotic Shift Keying Scheme .....  
..... *ZHANG Gang, ZHAO Changchang, ZHANG Tianqi* (2055)
- Blind Recognition of Code Length and Synchronization of Turbo Codes on Trellis Termination at Low SNR .....  
..... *WU Zhaojun, ZHANG Limin, ZHONG Zhaogen, YU Keyuan, YANG Yuncheng* (2063)
- Virtual Network Function Dynamic Deployment Algorithm Based on Prediction for 5G Network Slicing .....  
..... *TANG Lun, ZHOU Yu, YANG Youchao, ZHAO Guofan, CHEN Qianbin* (2071)
- Multi-priority Based Joint Optimization Algorithm of Virtual Network Function Migration Cost and Network Energy Consumption .....  
..... *TANG Lun, YANG Heng, MA Runlin, CHEN Qianbin* (2079)
- Surface Acoustic Wave Resonator Echo Signal Frequency Estimation .....  
..... *LIU Boquan, GUO Jiajia, LUO Zhiming* (2087)
- Design a Wideband Metasurface Antenna Array with Low Scattering Characteristics .....  
..... *LIU Tao, CAO Xiangyu, GAO Jun, LAN Junxiang, CONG Lili* (2095)
- Measurement Error Correction of the Orthogonal Magnetic Loop Antenna for Lightning-direction Finding .....  
..... *HU Miao, RUAN Zehui, LI Peng, CAO Baofeng, ZHOU Xuefang, SUN Jiaqi, HU Ximing, YE Sheng* (2103)
- Research on Synchronous Excitation and Detection Method for Synthetic Multi-frequency Magnetic Induction Signals .....  
..... *DU Qiang, ZHANG Kehao, KE Li, WANG Chenyang* (2108)
- A Novel Clutter Spectrum Compensation Method for End-fire Array Airborne Radar Based on Space-time Interpolation .....  
..... *LI Yongwei, XIE Wenchong* (2115)
- Research on Co-channel Base Station Interference Suppression Method of Passive Radar Based on LTE Signal .....  
..... *LÜ Xiaode, ZHANG Hanliang, LIU Zhongsheng, SUN Zhenghao, LIU Pingyu* (2123)
- Robust Sidelobe Suppression Method for Cognitive Radar Based on Sequential Optimization .....  
..... *JIN Songpo, ZHUANG Shanna* (2131)
- An Improved MUSIC Algorithm for Two Dimensional Direction Of Arrival Estimation .....  
..... *WANG Xudong, ZHONG Qian, YAN He, ZHANG Di* (2137)
- An Atomic Norm-Based Transmit Waveform Design Method in MIMO Radar .....  
..... *PANG Xiaojiao, ZHAO Yongbo, XU Baoqing, CAO Chenghu, SUO Zhiling* (2143)
- The Linear Complexity of a New Class of Generalized Cyclotomic Sequence of Order  $2p^m$  .....  
..... *WANG Yan, XUE Gaina, LI Shunbo, HUI Feifei* (2151)
- Integral Attack on Reduced-round Simeck Algorithm .....  
..... *REN Jiongjiang, LI Hang, CHEN Shaozhen* (2156)
- A Virtual Node Migration Method for Sensing Side-channel Risk .....  
..... *HUANG Kaizhi, PAN Qirun, YUAN Quan, YOU Wei* (2164)
- Research on Dynamic Threat Tracking and Quantitative Analysis Technology Based on Attribute Attack Graph .....  
..... *YANG Yingjie, LENG Qiang, PAN Ruixuan, HU Hao* (2172)

(To be continued on inside back cover)

(Continued)

Delegate Searchable Encryption Scheme Resisting Keyword Guess. ....  
..... *CAO Suzhen, LANG Xiaoli, LIU Xiangzhen, ZHANG Yulei, WANG Fei* (2180)

Recognition of Network Security Situation Elements Based on Depth Stack Encoder and Back Propagation  
Algorithm. .... *KOU Guang, WANG Shuo, ZHANG Da* (2187)

A Method to Visualize Deep Convolutional Networks Based on Model Reconstruction. ....  
..... *LIU Jiaming, XING Mengdao, FU Jixiang, XU Dan* (2194)

Scheduling Method Based on Markov Decision Process for Multi-sensor Cooperative Detection and Tracking .....  
..... *XU Gongguo, SHAN Ganlin, DUAN Xiusheng, QIAO Chenglin, WANG Haotian* (2201)

IBeacon/INS Data Fusion Location Algorithm Based on Unscented Kalman Filter .....  
..... *WANG Shouhua, LU Mingchi, SUN Xiyan, JI Yuanfa, HU Dingmei* (2209)

Total Variation Regularized Reconstruction Algorithms for Block Compressive Sensing .....  
..... *CHEN Derong, LÜ Haibo, LI Qiufu, GONG Jiulu, LI Zhiqiang, HAN Xiaojun* (2217)

RGB-D Saliency Detection Based on Optimized ELM and Depth Level ..... *LIU Zhengyi, XU Tianze* (2224)

Saliency Detection Using Wavelet Transform in Hypercomplex Domain .....  
..... *YU Ying, WU Qinglong, SHAO Kaixuan, KANG Yuxing, YANG Jian* (2231)

Person Re-identification Based on Attribute Hierarchy Recognition .....  
..... *CHEN Hongchang, WU Yancheng, LI Shaomei, GAO Chao* (2239)

Robust Visual Tracking Algorithm Based on Siamese Network with Dual Templates.....  
..... *HOU Zhiqiang, CHEN Lilin, YU Wangsheng, MA Sugang, FAN Jiulun* (2247)

3D Human Motion Prediction Based on Bi-directionalGated Recurrent Unit.....  
..... *SANG Haifeng, CHEN Zizhen* (2256)

Driver Fatigue Detection Through Deep Transfer Learning in an Electroencephalogram-based System .....  
..... *WANG Fei, WU Shichao, LIU Shaolin, ZHANG Yahui, WEI Ying* (2264)

Traffic Flow Prediction Based on Hybrid Model of Auto-regressive Integrated Moving Average and Genetic Particle  
Swarm Optimization Wavelet Neural Network .....  
..... *YIN Lisheng, TANG Shengqi, LI Sheng, HE Yigang* (2273)

Discrete Dynamic System without Degradation -configure  $N$  Positive Lyapunov Exponents .....  
..... *ZHAO Geng, LI Hong, MA Yingjie, QIN Xiaohong* (2280)