

第 35 卷 第 2 期
Vol.35 No.2

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

电子与信息学报

JOURNAL OF ELECTRONICS & INFORMATION TECHNOLOGY

2013

2



中国科学院电子学研究所 主办
国家自然科学基金委员会信息科学部

科学出版社 出版

电子与信息学报

DIANZI YU XINXI XUEBAO

第 35 卷 第 2 期

2013 年 2 月

目 次

论 文

- 一种宽带频谱检测的空域频域压缩感知方法 王韦刚, 杨 震, 胡海峰 (255)
- 时频双选信道 OFDM 系统的低复杂度 MMSE-SD 算法 惠永涛, 李兵兵, 同 钊, 薛磊磊 (261)
- 有限用户数多认知网络部分信道共享性能分析 衡玉龙, 黄天聪, 冯文江, 李 林 (267)
- 快速 QAM 信号多模盲均衡算法 李 进, 冯大政, 刘文娟 (273)
- 稀疏多径信道环境中 MIMO-OFDM 系统的 IQ 不平衡和信道联合估计
..... 梁 彦, 束 锋, 张一晋, Berber Stevan (280)
- 基于能效的解码转发中继 OFDM 链路自适应功率分配方案研究 陈 煜, 方旭明, 赵 越 (285)
- 60 GHz 毫米波无线网络中基于归一化分阶效用函数功率控制算法
..... 张 芳, 邹卫霞, 杜光龙, 周 正 (291)
- 准循环多进制 LDPC 码构造 杨 民, 张文彦, 钟 杰, 吴 杰 (297)
- 基于减轮 KASUMI 的 f9 算法单密钥攻击 徐新龙, 韩文报 (303)
- 基于消息认证函数的云端数据完整性检测方案 颜湘涛, 李益发 (310)
- 多目标约束下的光突发交换网络组装参数分析
..... 牛大伟, 于卫波, 米志超, 王 海, 董 超, 赵文栋 (314)
- 认知无线网络中一种新的反压式传输控制机制 孙 杰, 郭 伟 (320)
- 一种分簇无线传感器网络中的分布式信源编码算法 秦智超, 周 正, 赵小川 (328)
- IEEE802.15.4 中 AES-CCM 协议的扩展指令集实现 封 斌, 齐德昱, 韩海雯 (335)
- 基于提前分配路径的低时延片上路由器结构 郑小富, 顾华奎, 杨银堂, 黄忠凡 (341)
- 一种可信的基于协同过滤的服务选择模型 王海艳, 张大印 (349)
- 基于超几何分解的随机运算系统分析方法 马承光, 仲顺安, David Lilja, 屈若媛 (355)
- 基于混合多值离散粒子群优化的混合极性 Reed-Muller 最小化算法 卜登立, 江建慧 (361)
- 一种新的基于非反射对称非负特征值分解的 Freeman 分解 刘高峰, 李 明, 王亚军, 张 鹏 (368)
- 严重拖尾复合高斯杂波中目标的自适应极化检测 赵宜楠, 李凤从, 尹 彬 (376)
- 一种新的高速多目标快速参数化检测算法 郑纪彬, 朱文涛, 苏 涛, 何学辉 (381)
- 基于基追踪-Moore-Penrose 逆矩阵算法的稀疏信号重构 张晓伟, 李 明, 左 磊 (388)
- 基于矩阵完型的干涉式阵列米波雷达解模糊算法 陈根华, 陈伯孝 (394)
- 基于匹配场处理的天波雷达高度估计算法 游 伟, 何子述, 胡进峰 (401)
- 基于频率调制的多载波 Chirp 信号雷达通信一体化研究 李晓柏, 杨瑞娟, 程 伟 (406)
- 弹道中段目标平动径向速度估计的状态空间方法 魏少明, 王 俊, 孙进平, 毛士艺 (413)
- 基于压缩感知的二维 GTD 模型参数估计方法 占荣辉, 胡杰民, 张 军 (419)
- 一种改进的被动合成孔径算法用于舰船辐射噪声检测 赵 闪, 孙长瑜, 陈新华, 余华兵 (426)
- 基于子空间信道矩阵迭代的阶数估计算法 孙有铭, 刘洛琨, 崔 波, 郭 虹 (432)
- 基于压缩感知的自适应数字波束形成算法 王 建, 盛卫星, 韩玉兵, 马晓峰 (438)
- 非均匀块稀疏信号的压缩采样与盲重构算法 田鹏武, 康荣宗, 于宏毅 (445)

一种基于积分微分方程的泊松噪声去除算法	白 健, 冯象初	(451)
基于信息守恒的基本概率赋值概率转换方法	王万请, 赵拥军, 黄 洁, 赖 涛	(457)
局部保持鉴别投影及其在人脸识别中的应用	赵振华, 郝晓弘	(463)
电磁波集中器散射放大功能的应用与分析	庞旭东, 朱守正	(468)
综述评论		
基于感知的视频编码方法综述	蒋刚毅, 朱亚培, 郁 梅, 张 云	(474)
研究简报		
学习相位一致特征的无参考图像质量评价	李朝锋, 唐国凤, 吴小俊, 琚宜文	(484)
离散小波变换域非负张量分解的高光谱遥感图像压缩	李 进, 金龙旭, 李国宁	(489)
基于幅度加权的预失真线性调频超声编码激励	傅 娟, 韦 岗, 黄庆华	(494)
环 $F_2[u]/(u^4)$ 上的一类常循环码及其 Gray 象	王立启, 朱士信	(499)
一种快速精确设计滤波器型输出回路的新方法	曹 静, 丁耀根, 刘濮鲲	(504)

JOURNAL OF ELECTRONICS & INFORMATION TECHNOLOGY

Vol.35 No.2 Feb. 2013

CONTENTS

Papers

- A Method of Space-frequency Compressed Sensing on Wideband Spectrum Detection Wang Wei-gang, Yang Zhen, Hu Hai-feng (255)
- Low-complexity MMSE-SD Algorithm for OFDM Systems over Doubly-selective Channels Hui Yong-tao, Li Bing-bing, Tong Zhao, Xue Lei-lei (261)
- Performance Analysis on Partial Channel Sharing of Cognitive Networks with Finite User Population Heng Yu-long, Huang Tian-cong, Feng Wen-jiang, Li Lin (267)
- A Fast Multimodulus Blind Equalization Algorithm for QAM Signal Li Jin, Feng Da-zheng, Liu Wen-juan (273)
- Joint IQ Imbalance and Channel Estimation for MIMO-OFDM Systems with Sparse Multipath Channels Liang Yan, Shu Feng, Zhang Yi-jin, Berber Stevan (280)
- Energy Efficient Adaptive Power Allocation in OFDM-based Decode-and-forward Relay Link Chen Yu, Fang Xu-ming, Zhao Yue (285)
- Power Control Based on Unitary Step Utility Function in Millimeter Wave WPANs Zhang Fang, Zou Wei-xia, Du Guang-long, Zhou Zheng (291)
- Construction of Non-binary QC-LDPC Codes Yang Min, Zhang Wen-yan, Zhong Jie, Wu Jie (297)
- A Single Key Attack on Reduced-round KASUMI-based f9 Algorithm Xu Xin-long, Han Wen-bao (303)
- Data Integrity Checking Approach Based on Message Authentication Function for Cloud .. Yan Xiang-tao, Li Yi-fa (310)
- Analysis of Assembling Algorithm in Optical Burst Switching Networks under Multiple Objective Restrictions Niu Da-wei, Yu Wei-bo, Mi Zhi-chao, Wang Hai, Dong Chao, Zhao Wen-dong (314)
- A Novel Backpressure Transmission Control Mechanism for Cognitive Wireless Networks Sun Jie, Guo Wei (320)
- A Distributed Source Coding Algorithm for Clustering Wireless Sensor Networks Qin Zhi-chao, Zhou Zheng, Zhao Xiao-chuan (328)
- Instruction Set Extension Implementation for AES-CCM in IEEE802.15.4 Feng Bin, Qi De-yu, Han Hai-wen (335)
- Pre-allocated Path Based Low Latency Router Architecture for Network-on-chip Zheng Xiao-fu, Gu Hua-xi, Yang Yin-tang, Huang Zhong-fan (341)
- A Trustworthy Service Selection Model Based on Collaborative Filtering Wang Hai-yan, Zhang Da-yin (349)
- Analysis Method of Stochastic Computing System Based on Hypergeometric Decomposition Ma Cheng-guang, Zhong Shun-an, David Lilja, Qu Ruo-yuan (355)
- Hybrid Multi-valued Discrete Particle Swarm Optimization Algorithm for Mixed-polarity Reed-Muller Minimization Bu Deng-li, Jiang Jian-hui (361)
- A Novel Freeman Decomposition Based on Nonnegative Eigenvalue Decomposition with Non-reflection Symmetry Liu Gao-feng, Li Ming, Wang Ya-jun, Zhang Peng (368)
- Adaptive Polarimetric Detection of Targets in Heavy-tailed Compound-Gaussian Clutter Zhao Yi-nan, Li Feng-cong, Yin Bin (376)
- Novel Algorithm for Fast Parametric Detection of High-speed Multi-target Zheng Ji-bin, Zhu Wen-tao, Su Tao, He Xue-hui (381)
- Sparse Signal Reconstruction Based on Basis Pursuit-Moore-Penrose Inverse Matrix Zhang Xiao-wei, Li Ming, Zuo Lei (388)
- Ambiguity Resolution Based on Matrix Completion in Direction of Arrival Estimation for an Interferometric Array VHF Radar Chen Gen-hua, Chen Bai-xiao (394)
- Skywave Radar Altitude Estimation Algorithm Based on Matched-field Processing You Wei, He Zi-shu, Hu Jin-feng (401)
- Integrated Radar and Communication Based on Multicarrier Frequency Modulation Chirp Signal Li Xiao-bai, Yang Rui-juan, Cheng Wei (406)
- (To be continued on inside back cover)

(Continued)

A State Space Method for Estimating the Translational Radial Velocity of Ballistic Targets Wei Shao-ming, Wang Jun, Sun Jin-ping, Mao Shi-yi (413)

A Novel Method for Parametric Estimation of 2D Geometrical Theory of Diffraction Model Based on Compressed Sensing Zhan Rong-hui, Hu Jie-min, Zhang Jun (419)

An Improved Passive Synthetic Aperture Sonar Alogorithm Application for Detecting of the Ship Radiated Noise .. Zhao Shan, Sun Chang-yu, Chen Xin-hua, Yu Hua-bing (426)

Channel Order Estimation Algorithm Based on Subspace Channel Matrix Recursion Sun You-ming, Liu Luo-kun, Cui Bo, Guo Hong (432)

Adaptive Digital Beamforming Algorithm Based on Compressed Sensing Wang Jian, Sheng Wei-xing, Han Yu-bing, Ma Xiao-feng (438)

Compressive Sampling of Non-uniform Block Sparse Signals and the Blind Recovery Algorithm Tian Peng-wu, Kang Rong-zong, Yu Hong-yi (445)

An Integro-differential Equation Approach to Reconstructing Images Corrupted by Poisson Noise Bai Jian, Feng Xiang-chu (451)

A Transformation of Basic Probability Assignment to Probability Based on Conservation of Information Wang Wan-qing, Zhao Yong-jun, Huang Jie, Lai Tao (457)

Linear Locality Preserving and Discriminating Projection for Face Recognition Zhao Zhen-hua, Hao Xiao-hong (463)

The Application and Analysis of Scattering Magnifying Function of Electromagnetic Wave Concentrator Pang Xu-dong, Zhu Shou-zheng (468)

Reviews

Perceptual Video Coding: A Survey Jiang Gang-yi, Zhu Ya-pei, Yu Mei, Zhang Yun (474)

Research Notes

No-reference Image Quality Assessment with Learning Phase Congruency Feature Li Chao-feng, Tang Guo-feng, Wu Xiao-jun, Ju Yi-wen (484)

Hyper-spectral Remote Sensing Image Compression Based on Nonnegative Tensor Factorizations in Discrete Wavelet Domain Li Jin, Jin Long-xu, Li Guo-ning (489)

Predistorted Linear Frequency Modulation Ultrasound Coded Excitation Based on Amplitude Weighting Fu Juan, Wei Gang, Huang Qing-hua (494)

A Class of Constacyclic Codes Over $F_2[u]/(u^4)$ and Its Gray Image Wang Li-qi, Zhu Shi-xin (499)

A Novel Method for Designing Output Circuit of Filter Fast and Accurately . Cao Jing, Ding Yao-gen, Liu Pu-kun (504)