

多速率互质采样下的超分辨谱估计方法 .....  
 ..... 吕望晗, 王华力, 牟善祥, 罗章凯, 李文亮 953

基于信号重构的频谱弥散干扰抑制方法 .....  
 ..... 原 慧, 王春阳, 安 磊, 李 欣 960

基于低秩约束和边信息的近似消息传递 CS 重构算法 .....  
 ..... 谢中华, 马丽红 968

基于双平行互质阵列的二维高精度 DOA 估计 .....  
 ..... 冯明月, 何明浩, 郁春来, 曲智国 977

基于量测补偿的多传感器分布式滚动时域估计 .....  
 ..... 焦志强, 李卫华, 王 鹏 984

基于改进空间划分的目标分群算法 .....  
 ..... 樊振华, 师本慧, 陈金勇, 段同乐 991

· 传感器与信号处理 ·

GEO-LEO 双站 SAR 地面分辨特性及轨道构型分析 .....  
 ..... 王跃锐, 李真芳, 张金强, 姬 莉 996

SAR 图像最佳欧式空间距离矩阵匹配方法 .....  
 ..... 曾丽娜, 周德云, 潘 潜, 张 堃 1002

认知雷达起伏目标检测 ..... 邹 鲲, 吴德伟, 李 伟 1007

子场景处理的弹载前斜视 SAR 时域成像算法 .....  
 ..... 董 祺, 杨泽民, 孙光才, 邢孟道 1013

基于快速阈值迭代的 SAR 层析成像处理方法 .....  
 ..... 赵克祥, 毕 辉, 张冰尘 1019

基于 Toeplitz 矩阵的电离层相位扰动校正方法 .....  
 ..... 赵志国, 肖 卉 1024

系统  
工程  
与  
电子  
技术

第 39 卷 第 5 期  
2017 年 5 月

第 39 卷 第 5 期  
2017 年 5 月

目 次

• 系统工程 •

基于 PES 的 Petri 网可执行模型生成方法 .....	傅 炯, 罗爱民, 罗雪山, 刘俊先	1030
基于 DoDAF 的空基反导装备体系结构建模 .....	李大喜, 张 强, 李小喜, 许 勇, 杨建军	1036
战役性联合压制作战远程支援干扰部署优化 .....	罗金亮, 金家才, 王 雷, 丁 锋	1042
区间值直觉模糊 Petri 网及其在空战决策的应用 .....	张源原, 吴文海, 汪 节	1051
数据缺失状态下目标威胁评估的 $AR(p)$ 动态突变排序法 .....	唐 鑫, 杨建军, 冯 松, 任宝祥	1058
串件拼修策略下不完全修复件时变可用度评估建模 .....	周 亮, 彭英武, 李庆民, 李 华	1065
数据驱动的技术创新网络模体分析 .....	徐建国, 李孟军, 姜 江, 游翰霖	1072
面向复杂工程系统设计的云知识平台 .....	康文文, 李浩敏, 汤 超, 张莘艾	1078

• 制导、导航与控制 •

基于因子图协同定位辅助的单星定位方法 .....	唐成凯, 张玲玲, 廉保旺	1085
求解非光滑轨迹的自适应网格配点优化方法 .....	庞 威, 谢晓方, 刘青松, 刘家祺	1091
基于干扰补偿的拦截弹新型反演姿态控制 .....	卢晓东, 赵 辉, 赵 斌, 周 军	1100
基于模型解耦的双通道旋转弹分数阶控制 .....	鲍 雪, 王大志	1107
基于扩展观测量的车载捷联惯导系统外场标定 .....	李 政, 张志利, 张 炜, 周召发, 王昆明	1113
非奇异快速终端滑模控制 .....	华玉龙, 孙 伟, 迟宝山, 郭晓林, 刘国强	1119

• 通信与网络 •

基于低密度格码的编码协作中继系统 .....	高 翔, 吴湛击, 吴 熹	1126
MWSN 中基于功率自适应的拓扑维护算法 .....	姚玉坤, 徐栋梁, 任 智, 刘耀瑞	1134
频率选择信道下 STBC-OFDM 信号盲识别 .....	凌 青, 张立民, 闫文君, 于柯远	1141
基于多代理系统的动态信任态势感知机制 .....	李方伟, 李俊瑶, 聂益芳, 朱 江	1148

• 软件、算法与仿真 •

基于局部一致性的马尔可夫随机场去雾 .....	睦 萍, 毕笃彦, 马时平, 何林远	1154
关于卫星机器人地面装配的目标快速识别方法 .....	白 丰, 张明路, 张小俊, 史延雷	1160
装备平行仿真技术的基础理论问题 .....	葛承堃, 朱元昌, 邸彦强, 胡志伟	1169

• 可靠性 •

基于顺序 Dirichlet 分布的 Bayes 可靠性增长评估方法 .....	邢云燕, 蒋 平	1178
含屏蔽数据四单元混联系统的可靠性分析 .....	刘艳超, 师义民, 师小琳	1183

## CONTENTS

### Electronic Technology

Super-resolution spectrum estimation based on multirate co-prime sampling .....	953
..... LÜ Wanghan, WANG Huali, MU Shanxiang, LUO Zhangkai, LI Wenliang	
Smearred spectrum jamming suppression method based on signal reconstruction .....	960
..... YUAN Hui, WANG Chunyang, AN Lei, LI Xin	
Approximate message passing based on low-rank constraint and side information for CS recovery .....	968
..... XIE Zhonghua, MA Lihong	
2D-DOA estimation with high accuracy using double parallel co-prime array .....	977
..... FENG Mingyue, HE Minghao, YU Chunlai, QU Zhiguo	
Distributed moving horizon estimation for multi-sensors system based on measurements compensation .....	984
..... JIAO Zhiqiang, LI Weihua, WANG Peng	
Improved space partition based target clustering algorithm .....	991
..... FAN Zhenhua, SHI Benhui, CHEN Jinyong, DUAN Tongle	

### Sensors and Signal Processing

Ground resolution characteristic and orbital configuration analysis for GEO-LEO BiSAR .....	996
..... WANG Yuekun, LI Zhenfang, ZHANG Jinqiang, JI Li	
Optimal Euclidean distance matrix matching method for synthetic aperture radar images .....	1002
..... ZENG Lina, ZHOU Deyun, PAN Qian, ZHANG Kun	
Cognitive radar fluctuated target detection .....	1007
..... ZOU Kun, WU Dewei, LI Wei	
Missile-borne forward squint SAR time-domain imaging algorithm based on sub-region processing .....	1013
..... DONG Qi, YANG Zemin, SUN Guangcai, XING Mengdao	
SAR tomography method based on fast iterative shrinkage-thresholding .....	1019
..... ZHAO Kexiang, BI Hui, ZHANG Bingchen	
Approach to correct ionospheric phase perturbation based on Toeplitz matrix .....	1024
..... ZHAO Zhiguo, XIAO Hui	

### Systems Engineering

Approach for generating Petri net executable model based on physical exchange specification of architecture .....	1030
..... FU Jiong, LUO Aimin, LUO Xueshan, LIU Junxian	
Architecture modeling for equipment of airborne anti-missile based on DoDAF .....	1036
..... LI Daxi, ZHANG Qiang, LI Xiaoxi, XU Yong, YANG Jianjun	
Optimal deployment of distant support jamming formation in campaign joint suppress enemy air defense systems operation .....	1042
..... LUO Jinliang, JIN Jiakai, WANG Lei, DING Feng	
Interval valued intuitionistic fuzzy Petri net and its application in air combat decision-making .....	1051
..... ZHANG Yuanyuan, WU Wenhai, WANG Jie	
AR( $p$ ) dynamic catastrophe ranking method of target threat assessment under the loss of data .....	1058
..... 万方数据	
..... TANG Xin, YANG Jianjun, FENG Song, REN Baoxiang	

Time-varying availability evaluation modeling of incomplete repair parts under cannibalization .....	<i>ZHOU Liang, PENG Yingwu, LI Qingmin, LI Hua</i>	1065
Data-driven motif analysis of technology breakthrough network .....	<i>XU Jianguo, LI Mengjun, JIANG Jiang, YOU Hanlin</i>	1072
Cloud knowledge platform for complex system design .....	<i>KANG Wenwen, LI Haomin, TANG Chao, ZHANG Xinai</i>	1078

**Guidance, Navigation and Control**

Cooperation factor map of co-location aided single satellite navigation algorithm .....	<i>TANG Chengkai, ZHANG Lingling, LIAN Baowang</i>	1085
Adaptive mesh refinement and collocation optimization method for solving non-smooth trajectory .....	<i>PANG Wei, XIE Xiaofang, LIU Qingsong, LIU Jiaqi</i>	1091
Novel backstepping attitude control method for interception missile based on disturbance compensation .....	<i>LU Xiaodong, ZHAO Hui, ZHAO Bin, ZHOU Jun</i>	1100
Fractional order control for double-channel rolling projectile based on the decoupling model .....	<i>BAO Xue, WANG Dazhi</i>	1107
Outer field calibration for vehicle-based SINS based on extended observation .....	<i>LI Zheng, ZHANG Zhili, ZHANG Wei, ZHOU Zhaofa, WANG Kunming</i>	1113
Study on nonsingular fast terminal sliding mode control .....	<i>HUA Yulong, SUN Wei, CHI Baoshan, GUO Xiaolin, LIU Guoqiang</i>	1119

**Communications and Networks**

Coded cooperation relay scheme based on low density lattice code .....	<i>GAO Xiang, WU Zhanji, WU Xi</i>	1126
Power adaptation based topology maintenance algorithm of MWSN .....	<i>YAO Yukun, XU Dongliang, REN Zhi, LIU Yaorui</i>	1134
Blind classification algorithm for STBC-OFDM signals over frequency-selective channels .....	<i>LING Qing, ZHANG Limin, YAN Wenjun, YU Keyuan</i>	1141
Dynamic trust situation awareness mechanism based on multiagent system .....	<i>LI Fangwei, LI Junyao, NIE Yifang, ZHU Jiang</i>	1148

**Software, Algorithm and Simulation**

Markov random fields defogging based on local consistency .....	<i>SUI Ping, BI Duyan, MA Shiping, HE Linyuan</i>	1154
Fast target identification method about satellite robot ground assembly .....	<i>BAI Feng, ZHANG Minglu, ZHANG Xiaojun, SHI Yanlei</i>	1160
Basic theoretical issues of equipment parallel simulation technology .....	<i>GE Chenglong, ZHU Yuanchang, DI Yanqiang, HU Zhiwei</i>	1169

**Reliability**

Bayesian evaluation method for reliability growth test based on the ordered Dirichlet distribution .....	<i>XING Yunyan, JIANG Ping</i>	1178
Reliability analysis of four-unit hybrid systems with masked data .....	<i>LIU Yanchao, SHI Yimin, SHI Xiaolin</i>	1183