



ISSN 1001-506X
CN 11-2422/TN

系统工程与电子技术

Systems Engineering and Electronics

8

第35卷 第8期 2013年8月
Vol.35 No.8 August 2013



ISSN 1001-506X



- 美国工程索引 (EI) 收录
- 英国科学文摘 (INSPEC) 收录
- 日本科学技术振兴机构数据库 (JST) 收录
- 中文核心期刊要目总览收录
- 中国核心期刊 (遴选) 数据库收录
- 中国科技论文统计源期刊
- 中国科学引文数据库核心期刊

中国航天科工防御技术研究院 中国宇航学会 中国系统工程学会

万方数据

• 电子技术 •

基于柱面共形阵列天线的快速波达方向估计	司伟建, 万良田, 田作喜 1589
均匀圆阵相干信源二维波达方向估计 ...	毛维平, 李国林, 谢 鑫 1596
非合作直扩信号检测中的相关函数二阶矩方法	沙志超, 吴海斌, 任啸天, 黄知涛, 周一宇 1602
扫描 GMTI 系统运动目标精确定位方法	胡瑞贤, 王 彤, 保 铮 1607
基于盒差分滤波器的脉冲检测算法	李 程, 王 伟, 王雪松 1615
基于证据理论的联合概率数据关联算法	康 健, 李一兵, 林 云, 谢 红 1620
离散时间探测随机恒速目标的最优搜索算法	陈建勇, 王 健, 单志超 1627

• 传感器与信号处理 •

弹载俯冲非正侧阵雷达杂波特性与抑制方法	许京伟, 廖桂生, 朱圣棋, 王伟伟 1631
基于纳什均衡改进 PWF 的舰船检测方法	张宏稷, 杨 健, 宋建社, 叶春茂 1638
结构变形对相控阵天线电性能的影响分析	王从思, 康明魁, 王 伟, 普 涛 1644
利用 ESM 方位信息的多普勒盲区目标跟踪方法	韩 伟, 汤子跃, 朱振波 1650
分布式阵列相参合成雷达技术研究	鲁耀兵, 张履谦, 周荫清, 高红卫 1657

• 系统工程 •

通信距离约束下双无人机目标跟踪算法	符小卫, 冯慧成, 高晓光 1663
-------------------------	--------------------

基于时间约束的作战决策同步策略研究	邹志刚, 刘付显, 范海雄	1669
基于半约束随机搜索的空舰导弹目标分配方法	黄 峰, 陈中起, 冯金富, 李战武, 樊文智	1676
基于改进 Theil 不等系数的导弹备件消耗预测	赵建忠, 徐廷学, 李海军, 叶 文	1681
基于寿命周期费用技术的备件采购方案优选方法	耿俊豹, 牛明田	1687
基于 HMM 的电子设备状态监测与健康评估	张继军, 马登武, 张金春	1692
直觉模糊和粗集的复合多属性保障力量优选	张 倩, 陈柱明, 颜 宁, 苏保忠	1697
基于马田系统和 ϕ 转换的模糊积分多属性决策方法	常志朋, 程龙生	1702

• 制导、导航与控制 •

基于自抗扰与模糊逻辑的大攻角控制系统设计	马悦悦, 唐胜景, 郭 杰, 师 娇	1711
全捷联导引头寄生回路影响与辨识校正	李富贵, 夏群利, 祁载康, 孙 静	1717
速度约束辅助车载捷联惯导系统零速校正算法	付强文, 秦永元, 李四海	1723
高次非线性系统自适应动态面输出调节方法	邓 涛, 姚 宏, 杜 军	1729
非线性微分-代数子系统的反步控制及应用	臧 强, 张凯锋, 戴先中	1736

• 通信与网络 •

基于双门限能量检测的协作频谱感知算法	陈长兴, 符 辉, 牛德智, 耿道田	1742
OFDM 水声通信系统 LS-DFT 信道估计算法	郭铁梁, 赵旦峰, 杨大伟	1747
基于相关积的零相关区序列集构造方法	李明阳, 柏 鹏, 彭卫东, 王徐华, 常永昌	1753

• 软件、算法与仿真 •

基于双种群协同进化的 QoS 全局最优 Web 服务选择算法	吴映波, 王 旭, 刘 昕	1758
面向移动点的稳健动态 Delaunay 三角剖分技术	苏志刚, 王 争, 吴仁彪	1764
集成粗糙集和阴影集的簇特征加权模糊聚类算法	王丽娜, 王建东, 李 涛, 叶 枫	1769
面向非常规突发事件演化分析的动态模拟仿真系统	陈雪龙, 镇 培, 肖文辉	1777

• 可靠性 •

系统实时性能可靠性评估的贝叶斯方法	孙见忠, 左洪福	1790
应用战备转级检测数据分析鱼雷贮存可靠性	谢 勇, 苑秉成, 谢 辉	1797
突发和退化竞争失效产品的老练时间优化	黄秀平, 汤衍真, 孙 权, 周经伦	1803

Systems Engineering and Electronics

Vol. 35 No. 8

August 2013

CONTENTS

Electronic Technology

- Fast DOA estimation based on cylindrical conformal array antenna *SI Wei-jian, WAN Liang-tian, TIAN Zuo-xi* 1589
- 2D-DOA estimation of coherent signals based on uniform circular array *MAO Wei-ping, LI Guo-lin, XIE Xin* 1596
- Second-order moment of autocorrelation for signal detection in non-cooperative DS/SS communication *SHA Zhi-chao, WU Hai-bin, REN Xiao-tian, HUANG Zhi-tao, ZHOU Yi-yu* 1602
- Accurate location method of moving targets for SCAN-GMTI system *HU Rui-xian, WANG Tong, BAO Zheng* 1607
- Pulse detection algorithm based on difference of boxes filter *LI Cheng, WANG Wei, WANG Xue-song* 1615
- Joint probability data association algorithm based on evidence theory *KANG Jian, LI Yi-bing, LIN Yun, XIE Hong* 1620
- Optimal search algorithm for constant velocity random moving target detecting in discrete time *CHEN Jian-yong, WANG Jian, SHAN Zhi-chao* 1627

Sensors and Signal Processing

- Clutter characteristic and suppression approach for missile-borne diving non-broadside array radar *XU Jing-wei, LIAO Gui-sheng, ZHU Sheng-qi, WANG Wei-wei* 1631
- A modified PWF ship detection method based on Nash equilibrium *ZHANG Hong-ji, YANG Jian, SONG Jian-she, YE Chun-mao* 1638
- Analysis of electrical performances of phased array antennas with structural deformations *WANG Cong-si, KANG Ming-kui, WANG Wei, PU Tao* 1644
- Target tracking method using bearing information of ESM in Doppler blind zone *HAN Wei, TANG Zi-yue, ZHU Zhen-bo* 1650
- Study on distributed aperture coherence-synthetic radar technology *LU Yao-bing, ZHANG Lü-qian, ZHOU Yin-qing, GAO Hong-wei* 1657

Systems Engineering

- UAVs cooperative target tracking under communication range constraints *FU Xiao-wei, FENG Hui-cheng, GAO Xiao-guang* 1663
- Research on strategies of operation decision-making synchronization based on time restriction *ZOU Zhi-gang, LIU Fu-xian, FAN Hai-xiong* 1669
- Target assignment algorithm for air-to-ship missile based on semi-restraint stochastic searching *HUANG Feng, CHEN Zhong-qi, FENG Jin-fu, LI Zhan-wu, FAN Wen-zhi* 1676

Consumption forecast of missile spare parts based on improved Theil coefficient	
..... ZHAO Jian-zhong, XU Ting-xue, LI Hai-jun, YE Wen	1681
Optimal selection for procurement projects of spare parts based on life cycle cost technology	
..... GENG Jun-bao, NIU Ming-tian	1687
State monitoring and health evaluation of electronic equipment using HMM	
..... ZHANG Ji-jun, MA Deng-wu, ZHANG Jin-chun	1692
Compound multi-attribute decision-making for selecting power based on intuitionist fuzzy sets and rough sets ...	
..... ZHANG Qian, CHEN Gui-ming, YAN Ning, SU Bao-zhong	1697
Fuzzy integral multi-attribute decision making method based on Mahalanobis-Taguchi system and ϕ transformation	
..... CHANG Zhi-peng, CHENG Long-sheng	1702
Guidance, Navigation and Control	
High angle of attack control system design based on ADRC and fuzzy logic	
..... MA Yue-yue, TANG Sheng-jing, GUO Jie, SHI Jiao	1711
Effect of parasitic loop on strap-down seeker and compensated with identification method	
..... LI Fu-gui, XIA Qun-li, QI Zai-kang, SUN Jing	1717
ZUPT method for vehicular SINS aided by velocity constraint	
..... FU Qiang-wen, QIN Yong-yuan, LI Si-hai	1723
Adaptive dynamic surface output regulation method for high-order nonlinear systems	
..... DENG Tao, YAO Hong, DU Jun	1729
Backstepping control of nonlinear differential-algebraic equation sub-systems and its application	
..... ZANG Qiang, ZHANG Kai-feng, DAI Xian-zhong	1736
Communications and Networks	
Cooperative spectrum sensing algorithm based on double-threshold energy detection	
..... CHEN Chang-xing, FU Hui, NIU De-zhi, GENG Dao-tian	1742
LS-DFT channel estimation algorithm for underwater acoustic OFDM systems	
..... GUO Tie-liang, ZHAO Dan-feng, YANG Da-wei	1747
Construction of ZCZ sequence set based on correlation product	
..... LI Ming-yang, BAI Peng, PENG Wei-dong, WANG Xu-hua, CHANG Yong-chang	1753
Software, Algorithm and Simulation	
Dual population co-evolutionary Web services selection algorithms with QoS global optimization	
..... WU Ying-bo, WANG Xu, LIU Xin	1758
Robust dynamic Delaunay triangulation technology for moving points	
..... SU Zhi-gang, WANG Zheng, WU Ren-biao	1764
Cluster's feature weighting fuzzy clustering algorithm integrating rough sets and shadowed sets	
..... WANG Li-na, WANG Jian-dong, LI Tao, YE Feng	1769
Dynamic simulation system of unconventional emergency evolution analysis	
..... CHEN Xue-long, ZHEN Pei, XIAO Wen-hui	1777
Reliability	
Bayesian method for system real-time performance reliability assessment	
..... SUN Jian-zhong, ZUO Hong-fu	1790
Analysis of torpedo storage reliability based on information of operational readiness switch	
..... XIE Yong, YUAN Bing-cheng, XIE Hui	1797
Optimal burn-in time for competing failure products involving catastrophic and degradation failures	
..... HUANG Xiu-ping, TANG Yan-zhen, SUN Quan, ZHOU Jing-lun	1803