



ISSN 2095-5839

# JOURNAL OF AIR FORCE EARLY WARNING ACADEMY

# 空军预警学院学报

第34卷 第4期

Vol.34 No.4

4

2020

中国·武汉

KONGJUN  
YUJING XUEYUAN  
XUEBAO

# 空军预警学院学报

## KONGJUN YUJING XUEYUAN XUEBAO

第34卷 第4期

2020年8月

### 目 次

#### 预警探测

- 一种天波雷达SCIT-IIA舰船目标检测方法 ..... 崔炳宇 陈建文 于文启(235)  
基于稀疏约束拟合的机载雷达抗灵巧干扰方法 ..... 张吉建 谢文冲 陈威 沈伟(240)  
一种复合高斯背景下存在干扰时的目标检测方法 ..... 杨海峰 潘奎 胡晓琴 张东霞(247)  
基于Household变换阻塞矩阵的机载雷达抗主瓣干扰方法 ..... 沈伟 谢文冲 陈威 张吉建(250)  
常规地基雷达方位偏差在线监测校正与工程实现 ..... 江晶 李佳炜 冯讯 黄源源(256)  
基于压缩感知的FDA-MIMO雷达波束形成算法 ..... 陈浩 马建朝 吕明久 谢谠 刘亚娜(261)  
干扰目标环境下机载雷达非均匀STAP检测器性能分析 ..... 熊元燚 谢文冲(266)  
连续波主动防护雷达防弹天线罩性能研究 ..... 马可 王永华 田江 王毅(271)

#### 信息对抗

- 基于波束数量控制的多波束干扰资源调度研究 ..... 崔哲铭 彭世蕤 任明秋 龙世敏(274)

#### 信息、情报与通信

- 一种改进SWOMP的大规模MIMO信道估计算法 ..... 王晓亮 梅进杰 姚禹 孟紫薇(279)  
一种需求自适应雷达网威力图构建方法 ..... 张秀伟 马建朝 吴彩华 吴瑕(283)

#### 电子科学与技术

- 基于模糊滑模与PI+重复控制的电压型PWM整流器研究 ..... 纪天成 亓迎川(288)  
一种高性能Fabry-Pérot贴片天线设计 ..... 陈强 贺昌辉 朱振波 张迪 黄思宇(293)  
基于等效电路模型的高频透波频率选择吸波体设计 ..... 涂灏 叶泽浩 宋亚伟 唐朝(297)

#### 军事教育与管理

- 军校专业基础混合式“金课”建设路径研究与实践 ..... 王党卫 汪枫 舒重胜(301)  
预警通信装备原理与运用课程的研讨式教学法 ..... 朱淑梅 梅进杰 程伟 罗少华(306)  
电子对抗装备原理与运用“课程思政”的探索与实践 ..... 魏昱 何缓 彭世蕤(309)

- 《空军预警学院学报》投稿须知 ..... (260)  
《空军预警学院学报》声明 ..... (296)  
关于论文学术不端检测的声明 ..... (312)

# JOURNAL OF AIR FORCE EARLY WARNING ACADEMY

Vol.34 No.4

Aug. 2020

## CONTENTS

### Early Warning Detection

- A skywave OTHR SCIT-IIA ship target detection method ..... CUI Bingyu CHEN Jianwen YU Wenqi(235)  
Smart jamming suppression method for airborne radar based on sparse constraint fitting ..... ZHANG Jijian XIE Wenchong CHEN Wei SHEN Wei(240)  
A method for target detection in compound Gaussian clutter and interference ..... YANG Haifeng PAN Kui HU Xiaoqin ZHANG Dongxia(247)  
Anti-mainlobe jamming method of airborne radar based on Household transform blocking matrix ..... SHEN Wei XIE Wenchong CHEN Wei ZHANG Jijian(250)  
Conventional ground-based radar's azimuth deviation online monitoring and correction and engineering implementation ..... JIANG Jing LI Jiawei FENG Xun HUANG Yuanyuan(256)  
Beamforming algorithm for FDA-MIMO radar based on compressed sensing ..... CHEN Hao MA Jianchao LV Mingjiu XIE Dang LIU Yana(261)  
Analysis on performance of non-homogeneity STAP detectors for airborne radar in jamming target environment ..... XIONG Yuanyi XIE Wenchong(266)  
Research on performance of continuous wave active protection radar bulletproof radome ..... MA Ke WANG Yonghua TIAN Jiang WANG Yi(271)

### Information Countermeasure

- Research on multi-beam interference resource scheduling based on beam quantity control ..... CUI Zheming PENG Shirui REN Mingqiu LONG Shimin(274)

### Information, Intelligence & Communication

- Modified SWOMP channel estimation method in massive MIMO system ..... WANG Xiaoliang MEI Jinjie YAO Yu MENG Ziwei(279)  
A method for constructing coverage map of demand adaptive radar network ..... ZHANG Xiuwei MA Jianchao WU Caihua WU Xia(283)

### Electronic Science and Technologies

- Research on voltage-type PWM rectifier based on fuzzy sliding mode, PI and repetitive control ..... JI Tiancheng QI Yingchuan(288)  
Design of a novel Fabry-Pérot patch antenna with high property ..... CHEN Qiang HE Changhui ZHU Zhenbo ZHANG Di HUANG Siyu(293)  
Design of high-transmittance frequency selective rasorber based on equivalent circuit model ..... TU Hao YE Zehao SONG Yawei TANG Chao(297)

### Military Education & Management

- Research and practice of construction path of hybrid "golden course" for professional foundation in military academies ..... WANG Dangwei WANG Feng SHU Chongsheng(301)  
Discussion-based teaching method for early warning communication equipment principle and application course ..... ZHU Shumei MEI Jinjie CHENG Wei LUO Shaohua(306)  
Exploration and practice of "ideological and political education" in PAECE course ..... WEI Yu HE Huan PENG Shirui(309)