



中国航天

ISSN
CN 3

Q K 1 8 6 3 0 1 8



空天防御

AIR & SPACE DEFENSE

2018 **4**

第1卷 总第4期

上海机电工程研究所
上海交通大学出版社有限公司

主办

空天防御

KONG TIAN FANG YU

2018年10月出版

2018年创刊·季刊

第1卷 第4期
(总第4期)

目 次

导弹武器系统与总体技术

末段反导预警系统的界壳论模型及其运用 郑志洲,侯广华,杨志强,贾林,雷云茂 (1)

导航制导与控制技术

基于改进型神经网络 PID 算法的太阳翼 α 驱动控制技术

..... 吴鹏飞,石然,易志坤,吴智杰,仇存凯,付伟平 (8)

一种战场局部环境超宽带定位技术研究 何亚,毛勇 (18)

地空导弹垂直发射高精度初始姿态获取技术研究 刘伟鹏,袁杰波,秦峰,吴镇,赵文龙 (24)

巡航导弹高度跟踪制导律研究 李晓龙,张顺家,李勇,毕鹏,尹航 (29)

电子综合对抗与信息技术

一种高效的雷达信号全脉冲特征提取方法 商诺诺,梁艳,翟恒峰,原浩娟 (37)

红外成像导引头抗干扰性能评估方法研究 马潮,陆志沣,余海鸣,洪泽华,杨杰,乔宇 (44)

基于分布式的隐蔽式探测技术研究 陈川,顾村锋 (48)

系统建模与仿真技术

激光半主动单像素成像探测与仿真技术初探 田义,沈涛,李凡,孟宇麟,李奇,柴娟芳 (52)

导弹运输装填发射车吊装稳定性仿真研究 缪东辉,马张健,李佳圣,谢健,朱迪 (58)

防空导弹对过失速机动目标拦截研究 帅鹏,周波华,王飞,许新鹏,江中 (65)

国际空天防御发展态势

美国宙斯盾中段反导拦截弹 SM-3 发展历程研究 蔡月进,刘博,周藜莎,周新耀,王皓 (72)

美英法空袭叙利亚作战特点分析及防空装备发展启示 刘杰,陈海燕,高璞,梁壮 (78)

期刊基本参数：CN31-2147 * 2018 * q * A4 * 84 * zh * P * 20.00 * 1000 * 13 * 2018-10

AIR & SPACE DEFENSE

Vol. 1 No. 4 (Series 4)

Oct. 2018 (Quarterly)

CONTENTS

Missile Weapon System and General Technology

- Periphery Theory Model and Application of Terminal Anti - Missile Early-Warning System ZHENG Zhizhou, HOU Guanghua, YANG Zhiqiang, JIA Lin, LEI Yunmao (1)

Navigation, Guidance and Control Technology

- Research on α Drive Control for Solar Array Based on Improved Neural Network PID WU Pengfei, SHI Ran, YI Zhikun, WU Zhijie, QIU Cunkai, FU Weiping (8)
Research on Ultra-wideband Positioning Technology in Battlefield Local Environment HE Ya, MAO Yong (18)
Study on Obtainment of High Accuracy Initial Attitude for Vertical Launching of Ground-to-air missile LIU Weipeng, YUAN Jiebo, QIN Feng, WU Zhen, ZHAO Wenlong (24)
Study on height tracking guidance laws of Cruise missile LI Xiaolong, ZHANG Shunjia, LI Yong, BI Peng, YIN Hang (29)

Integrated Electronic Countermeasures and Information Technology

- An Efficient Method of Full-pulse Feature Extraction for Radar Signals SHANG Nuonuo, LIANG Yan, ZHAI Hengfeng, YUAN Haojuan (37)
Research on Evaluation Method of Anti-interference Performance of Infrared Seeker MA Chao, LU Zhifeng, YU Haiming, HONG Zehua, YANG Jie , QIAO Yu (44)
Concealed Detection Research Based on Distributed Techniques CHEN Chuan, GU Cunfeng (48)

System Modeling and Simulation Technology

- Conception of Semi-active Laser Single Pixel Imaging Detection and Simulation TIAN Yi, SHEN Tao, LI Fan, MENG Yulin, LI Qi, CHAI Juanfang (52)
Simulation Analysis for Hoisting Stability of a Missile Trans-Loading Vehicle MIAO Donghui, MA Zhangjian, LI Jiasheng, XIE Jian, ZHU Di (58)
Intercept Strategy Research on Air Defense Missile Against Over Stall Maneuver Target SHUAI Peng, ZHOU Bohua, WANG Fei, XU Xinpeng, JIANG Zhong (65)

International Air & Space Defense Development

- Research on Development of Aegis Midcourse Anti-Missile SM-3 Interceptor ZANG Yuejin, LIU Bo, ZHOU Lisha, ZHOU Xinyao, WANG Hao (72)
Features of Air Strike on Syria by the US, Britain and France as well as Development of Air Defense Equipment Liu Jie, Chen Haiyan, Gao Pu, Liang Zhuang (78)



空天防御

2018年创刊

季刊 总第4期

第1卷 第4期 2018年10月

AIR & SPACE DEFENSE

Established in 2018

Quarterly, Series No.4

Vol.1 No.4 Oct.2018

主管单位 中国航天科技集团有限公司

主办单位 上海机电工程研究所

出版单位 上海交通大学出版社有限公司

地 址 上海市闵行区元江路3888号

邮 编 201109

电 话 (021) 24185113

期刊网站 www.ktfyjournal.com

电子信箱 no8publish@126.com

印刷单位 上海三联读者服务合作公司

Authorized by China Aerospace Science and Technology Corporation

Sponsored by Shanghai Electro-Mechanical Engineering Institute

Published by Shanghai Jiaotong University Press Co. Ltd.

Address No.3888 Yuanjiang Road, Minhang District of Shanghai

Postcode 201109

Tel. (+8621) 24185113

Website www.ktfyjournal.com

Email no8publish@126.com

Printing Shanghai Sanlian Reader Service Co.

本期责任编辑 朱 婧

刊 号 ISSN 2096-4641
CN 31-2147/E

国内定价 20.00元 / 期

ISSN 2096-4641



9 772096 464189