

北京航空航天大学学报

第 51 卷 第 2 期 (总第 384 期) 2025 年 2 月

目 次

- 基于 AF-BiTCN 的弹道中段目标 HRRP 识别 王晓丹, 王鹏, 宋亚飞, 向前, 李京泰 (349)
基于全球星机会信号的多普勒定位技术 秦红磊, 张宇, 师广婷, 王丹瑶 (360)
机器与 AGV 联合利用再生能源的混合流水车间调度问题 朱光宇, 贾唯鸿, 李德彪 (368)
低信噪比 S 模式基带信号到达时间估计联合算法 宫峰勋, 第五瑶光 (380)
Buck-Boost 转换器总剂量辐射效应分析与抗辐射加固设计方法 郭仲杰, 卢沪, 刘楠, 吴龙胜 (389)
空间混洗与链式残差增强的轻量级视频人群计数 陈永, 张娇娇, 周方春 (397)
Swarm 异构轨道卫星运动学绝对和相对定轨 金彪, 李申阳, 刘宁宁, 赵立谦 (409)
单点吊挂集装箱动稳定性分析 吕雨竹, 万海明, 徐玉貌 (419)
基于策略蒸馏的四足机器人步态学习方法 朱晓庆, 王涛, 阮晓钢, 陈江涛, 南博睿, 毕兰越 (428)
基于均匀设计试验法的电磁线圈发射关键参数优化 杨保成, 韩俊峰 (440)
终端区离场航空器自主路径规划 王红勇, 郭宇鹏 (446)
一种面向非结构化道路的点云语义分割方法 王章宇, 陈阳, 周彬, 王杰, 段星集, 赵忠山 (457)
基于综合评价的 BWB 无人机总体方案优化 索欣诗, 王宇, 朱正 (466)
考虑机轮形变的车辆-飞机牵引滑出系统运动学特性分析 鲁鑫, 孙宇宁, 唐杰, 张威 (478)
无人机动态撞网回收制导控制方法与飞行试验 王玉杰, 陈清阳, 高显忠, 邓小龙, 侯中喜 (487)
引信目标与干扰信号稀疏分类识别方法 刘冰, 郝新红, 秦高林, 时明心, 刘佳琪 (498)
FSK 调制系统的干扰对抗效果 马雅楠, 王建, 范广腾, 曹璐 (507)
CFRP 平-折-平胶接接头疲劳寿命预测 许昶, 肖勇, 邓鹏程 (518)
翼身融合布局平面参数对变弯度减阻特性分析 王雨桐, 刘悦, 王浩, 杨体浩, 刘红阳, 周铸 (525)
UH 模型数值计算优化分析 张奎, 姚仰平 (546)
Boltzmann-Rykov 模型方程气体动理论统一算法与喷管流动 李凡, 李志辉, 陈爱国 (553)
减速器滞回模型及其应用 程慧明, 石照耀 (563)
飞机环控系统发动机动态引气地面试验设备总体设计方法 吴豪, 郑永贵, 刘猛, 王浚 (573)
基于级联森林和多模态融合的脑力疲劳识别算法 邓浩伟, 侯月皎, 张朝月, 徐慕华, 朱玲玲, 赵永岐 (584)
基于多星联合被动微波成像的运动目标检测 李睿, 邓丽, 段然 (594)
一种在线训练的自决策主题爬虫算法 熊观野, 杨百龙 (602)

- 预弯曲螺旋缠绕的气动软体夹持器的研究 谭瞰旭, 滕燕, 王春渊 (616)
- 基于 CT 影像搏动性耳鸣识别及高致病区域 田山, 王治文, 曹学鹏, 苏磊, 刘兆会 (625)
- 基于 SVT 的广义斜投影三维极化滤波方法 王栗沅, 何华锋, 何耀民, 韩晓斐, 李震 (633)
- 一种面向非合作空间辐射源的自扩展识别方法 陈仕凯, 冀金金, 荆有波 (644)
- 基于动态尺度观测器的多无人机立体包含控制 王昊, 李新凯, 张宏立, 杨加秀, 窦磊 (655)
- 基于航位推算的车载组合导航系统 NHC 杆臂估计算法 邓成剑, 陈起金, 张提升, 牛小骥 (668)
- 小视场角条件下地形跟随飞行适应角法的改进 朱日楠, 王彪, 唐超颖 (676)
- 基于嵌套连接的多尺度红外与可见光图像融合 吴楠, 穆成坡, 贺杨, 刘太晔 (683)
- 多阶段退化数据融合的伺服驱动单元可靠性建模 张忠文, 彭翀, 车众元, 王基坤 (692)

期刊基本参数: CN 11-2625/V * 1956 * m * A4 * 356 * zh * P * ¥ 50.00 * 400 * 35 * 2025-02

(编 辑 张 嵘 孙 芳 卞欢欢 王 茜 李亚泰)

JOURNAL OF BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS

Vol. 51 No. 2 (Sum 384) February 2025

CONTENTS

HRRP recognition of midcourse ballistic targets based on AF-BiTCN	WANG Xiaodan, WANG Peng, SONG Yafei, XIANG Qian, LI Jingtai (349)
Doppler positioning technology based on Globalstar opportunity signals	QIN Honglei, ZHANG Yu, SHI Guangting, WANG Danyao (360)
Hybrid flow-shop scheduling problem considering joint of machine and AGV with renewable energy	ZHU Guangyu, JIA Weihong, LI Debiao (368)
Joint algorithm for time of arrival estimation of S-mode baseband signals with low SNR	GONG Fengxun, DIWU Yaoguang (380)
Total ionizing dose effect analysis and radiation hardening design method of Buck-Boost converter	GUO Zhongjie, LU Hu, LIU Nan, WU Longsheng (389)
Lightweight video crowd counting with spatial shuffling and chain residual enhancement	CHEN Yong, ZHANG Jiaojiao, ZHOU Fangchun (397)
Kinematic absolute and relative orbit determination of Swarm satellites with heterogeneous orbits	JIN Biao, LI Shenyang, LIU Ningning, ZHAO Liqian (409)
Dynamic stability analysis of a single-point hanging container	LYU Yuzhu, WAN Haiming, XU Yumao (419)
Gait learning method of quadruped robot based on policy distillation	ZHU Xiaoqing, WANG Tao, RUAN Xiaogang, CHEN Jiangtao, NAN Borui, BI Lanyue (428)
Optimization of key parameters of electromagnetic coil launching based on uniform design experimentation	YANG Baocheng, HAN Junfeng (440)
Autonomous path planning of departing aircraft in terminal area	WANG Hongyong, GUO Yupeng (446)
A point cloud semantic segmentation method for unstructured roads	WANG Zhangyu, CHEN Yang, ZHOU Bin, WANG Jie, DUAN Xingji, ZHAO Zhongshan (457)
Overall scheme optimization of BWB UAVs based on comprehensive evaluation	SUO Xinshi, WANG Yu, ZHU Zheng (466)
Kinematic characteristics analysis of vehicle-aircraft towing taxi system considering wheel deformation	LU Xin, SUN Yuning, TANG Jie, ZHANG Wei (478)
Guidance and control method for dynamic net-recovery of UAV and the flight test verification	WANG Yujie, CHEN Qingyang, GAO Xianzhong, DENG Xiaolong, HOU Zhongxi (487)
Sparse classification and recognition method of fuzed targets and jamming signals	LIU Bing, HAO Xinhong, QIN Gaolin, SHI Mingxin, LIU Jiaqi (498)
Countermeasure effect of jamming to FSK modulation system	MA Yanan, WANG Jian, FAN Guangteng, CAO Lu (507)
Fatigue life prediction of CFRP flat-joggle-flat bonded joint	XU Chang, XIAO Yong, DENG Pengcheng (518)
Drag reduction characteristics analysis of variable camber based on plane parameters of blended wing body configuration	WANG Yutong, LIU Yue, WANG Hao, YANG Tihao, LIU Hongyang, ZHOU Zhu (525)
Optimization analysis for numerical calculation of UH model	ZHANG Kui, YAO Yangping (546)
Boltzmann-Rykov model equation gas-kinetic unified algorithm and nozzle flow	LI Fan, LI Zhihui, CHEN Aiguo (553)
Hysteresis model of reducer and its application	CHENG Huiming, SHI Zhaoyao (563)

Overall design method of ground test equipment for engine dynamic air bleed of aircraft environmental control system	WU Hao, ZHENG Yonggui, LIU Meng, WANG Jun	(573)
Mental fatigue recognition algorithm based on cascade forest and multi-modal fusion	DENG Haowei, HOU Yuejiao, ZHANG Chaoyue, XU Muhua, ZHU Lingling, ZHAO Yongqi	(584)
Moving targets detection based on multi-satellite joint passive microwave imaging	LI Rui, DENG Li, DUAN Ran	(594)
A self-decision topic crawler algorithm with online training	XIONG Guanye, YANG Bailong	(602)
Research on pre-curved spiral wound pneumatic soft gripper	TAN Tunxu, TENG Yan, WANG Chunyuan	(616)
Identification of pulsatile tinnitus and visualization of high pathogenic regions based on CT images	TIAN Shan, WANG Zhiwen, CAO Xuepeng, SU Lei, LIU Zhaohui	(625)
Three-dimensional polarization filtering method of generalized oblique projection based on SVT	WANG Liyuan, HE Huafeng, HE Yaomin, HAN Xiaofei, LI Zhen	(633)
A self-expanding identification method for non-cooperative space radiation sources	CHEN Shikai, JI Jinjin, JING Youbo	(644)
Multi-UAV stereoscopic inclusion control based on dynamic scale observer	WANG Hao, LI Xinkai, ZHANG Hongli, YANG Jiaxiu, DOU Lei	(655)
NHC lever arm estimation algorithm for vehicle-integrated navigation systems based on dead reckoning	DENG Chengjian, CHEN Qijin, ZHANG Tisheng, NIU Xiaoji	(668)
Improvement of terrain following flight adaptive angle method under small field of view conditions	ZHU Rinan, WANG Biao, TANG Chaoying	(676)
Multi-scale infrared and visible image fusion based on nest connection	WU Nan, MU Chengpo, HE Yang, LIU Taiye	(683)
Servo drive unit reliability modeling with multi-stage degradation data fusion	ZHANG Zhongwen, PENG Chong, CHE Zhongyuan, WANG Jikun	(692)