

目 次

聚合物基复合材料凸头螺栓连接研究进展 ..... 董慧民, 李小刚, 马绪强, 程丽君, 李跃腾, 钱黄海 (745)

基于干涉接触的前缘缝翼尾缘结构设计与分析 ..... 冯蕴雯, 张家乐, 薛小锋, 毛艺皓, 袁坚锋 (761)

高分辨率立体测绘相机系统热控设计及验证 ..... 鲁盼, 赵振明, 高腾, 连新昊, 夏晨晖, 王玉强 (768)

基于 DW-MEE 的不停航施工情境下机场安全风险预警 ..... 潘丹, 罗帆, 李永周, 肖琴, 张攀科, 徐瑞华 (780)

基于高层语义嵌入的孪生网络跟踪算法 ..... 蒲磊, 李海龙, 侯志强, 冯新喜, 何玉杰 (792)

考虑安全性的 BWB 民机飞行控制系统设计 ..... 马立群, 孙晓哲 (804)

基于液滴参数检测的涡街湿气过读预测模型 ..... 李金霞, 丁红兵, 王超, 孙宏军 (815)

地基北斗 GEO 卫星直反信号功率测量偏差分析 ..... 阮宏梁, 洪学宝, 王永宁, 汉牟田, 杨东凯 (825)

共轴刚性旋翼直升机着舰飞行特性 ..... 苏大成, 汪正中, 吴令华, 黄水林 (832)

固定时间收敛的三维制导控制一体化设计 ..... 张宽桥, 周旋风, 门星火, 周含冰 (842)

一种面向空间飞行器视觉导航的椭圆检测算法 ..... 陆婷婷, 邓志均, 顾鑫, 费智婷, 吴新峰, 王华 (853)

卫星不足情况下低成本 MEMS-INS/GPS 伪松组合导航 ..... 李灿, 沈强, 汪立新, 左凯, 田颖 (869)

无人直升机 LPV 控制律设计 ..... 段鏖, 杨庶, 李爱军 (879)

Q345 钢两相流冲蚀实验研究 ..... 王志杰, 姚军, 熊家志, 赵彦琳, 常笑, 董士刚 (891)

基于 DM-DSC 的舰载机着舰自动复飞控制算法 ..... 崔凯凯, 韩维, 刘玉杰, 刘洁, 褚达文, 崔荣伟 (900)

基于多特征融合的电磁换向阀故障模式识别 ..... 马栋, 刘志浩, 高钦和, 黄通 (913)

曲率连续造型方法对激波噪声的影响机理 ..... 赵天铭, 侯杰莹, 柳阳威 (922)

航空电子限时令牌太赫兹互连的实时性能分析 ..... 李佳, 李峭, 左沅君, 熊华钢 (932)

薄膜热电偶热氧化可靠性及结构优化 ..... 王一丹, 孙宇锋, 雷东阳, 薛雨晴 (943)

基于光场成像的燃烧颗粒粒径与速度测量方法 ..... 张弛, 黄益智, 王长健, 仪建华, 许传龙 (949)

狭长型封闭舱室内非定常流动模拟的湍流模型比较 ..... 韩逸飞, 胡雪松, 高盈, 张永志 (957)

分子筛氧气浓缩器多因素退化试验设计 ..... 孙宏达, 景博, 章余, 焦晓璇 (965)

平流层艇载风速计非接触供电系统的设计 ..... 袁明显, 周江华, 郝勇, 张晓荣, 秦慧娴 (972)

考虑环境干扰的大型贮液箱结构安全评估模型 ..... 陈媛, 周志杰, 王杰, 明志超, 李改灵, 李亚鹏 (981)

新型自适应起落架的单支腿落震性能研究 ..... 孙浩, 尹乔之, 魏小辉, 陈帅, 聂宏 (990)

# JOURNAL OF BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS

Vol. 49 No. 4 ( Sum 362 ) April 2023

## CONTENTS

Research progress in mechanically fastened polymer-matrix composite joints with protruding-head bolts	
..... DONG Huimin, LI Xiaogang, MA Xuqiang, CHENG Lijun, LI Yueteng, QIAN Huanghai	(745)
Structural design and analysis of leading edge slat interference trailing edge	
..... FENG Yunwen, ZHANG Jiale, XUE Xiaofeng, MAO Yihao, YUAN Jianfeng	(761)
Thermal control design and verification for high resolution stereo mapping camera system	
..... LU Pan, ZHAO Zhenming, GAO Teng, LIAN Xinhao, XIA Chenhui, WANG Yuqiang	(768)
Airport safety risk early warning under circumstance of non-suspend air construction based on DW-MEE	
..... PAN Dan, LUO Fan, LI Yongzhou, XIAO Qin, ZHANG Panke, XU Ruihua	(780)
Siamese network tracking based on high level semantic embedding	
..... PU Lei, LI Hailong, HOU Zhiqiang, FENG Xinxi, HE Yujie	(792)
Design of flight control system for BWB civil aircraft considering safety	
..... MA Liqun, SUN Xiaozhe	(804)
A new overreading model for wet gas vortex metering considering entrained droplet flow parameters	
..... LI Jinxia, DING Hongbing, WANG Chao, SUN Hongjun	(815)
Power measurement deviations of direct and reflected signals from BDS GEO satellites in ground-based GNSS-R applications	
..... RUAN Hongliang, HONG Xuebao, WANG Yongning, HAN Mutian, YANG Dongkai	(825)
Flight characteristics of coaxial-rigid-rotor helicopter during deck landing	
..... SU Dacheng, WANG Zhengzhong, WU Linghua, HUANG Shuilin	(832)
Three-dimensional integrated guidance and control design with fixed-time convergence	
..... ZHANG Kuanqiao, ZHOU Xuanfeng, MEN Xinghuo, ZHOU Hanbing	(842)
An ellipse detection algorithm for spacecraft optical navigation	
..... LU Tingting, DENG Zhijun, GU Xin, FEI Zhiting, WU Xinfeng, WANG Hua	(853)
Pseudo loosely-integrated navigation of low-cost MEMS-INS/GPS with insufficient observable satellites	
..... LI Can, SHEN Qiang, WANG Lixin, ZUO Kai, TIAN Ying	(869)
Design of LPV control law for unmanned helicopter	
..... DUAN Biao, YANG Shu, LI Aijun	(879)
Experimental research on erosion of Q345 steel under two-phase flow condition	
..... WANG Zhijie, YAO Jun, XIONG Jiazhi, ZHAO Yanlin, CHANG Xiao, DONG Shigang	(891)
Automatic wave-off control algorithm for carrier aircraft based on DM-DSC	
..... CUI Kaikai, HAN Wei, LIU Yujie, LIU Jie, CHU Dawen, CUI Rongwei	(900)
Solenoid directional control valve fault pattern recognition based on multi-feature fusion	
..... MA Dong, LIU Zhihao, GAO Qinhe, HUANG Tong	(913)
Influence mechanism of continuous curvature shaping method on buzz-saw noise	
..... ZHAO Tianming, HOU Jiexuan, LIU Yangwei	(922)
Real-time performance analysis on Terahertz interconnection with timed token protocol in avionics	
..... LI Jia, LI Qiao, ZUO Yuanjun, XIONG Huagang	(932)
Thermal oxidation reliability and structure optimization of thin film thermocouple	
..... WANG Yidan, SUN Yufeng, LEI Dongyang, XUE Yuqing	(943)
Simultaneous measurement of size and velocity of burning particles based on light field imaging	
..... ZHANG Chi, HUANG Yizhi, WANG Changjian, YI Jianhua, XU Chuanlong	(949)
Comparison of turbulence models for unsteady flow simulation in a long and narrow cabin	
..... HAN Yifei, HU Xuesong, GAO Ying, ZHANG Yongzhi	(957)
Multi-factor degradation test design for molecular sieve oxygen concentrator	
..... SUN Hongda, JING Bo, ZHANG Yu, JIAO Xiaoxuan	(965)
Design of contactless power supply system for stratospheric airship anemometer	
..... YUAN Mingyu, ZHOU Jianghua, HAO Yong, ZHANG Xiaorong, QIN Huixian	(972)
Structural safety assessment model of large liquid tanks considering environmental disturbance	
..... CHEN Yuan, ZHOU Zhijie, WANG Jie, MING Zhichao, LI Gailing, LI Yapeng	(981)
Research of single leg drop performance of new adaptive landing gear	
..... SUN Hao, YIN Qiaozhi, WEI Xiaohui, CHEN Shuai, NIE Hong	(990)