

中国科技核心期刊（中国科技论文统计源期刊）

中文核心期刊要目总览

中国科学引文数据库来源期刊

ISSN 1674-5825

CN 11-5008/V

载人航天

MANNED SPACEFLIGHT

2018年 第5期（双月刊）

第24卷（总第85期）

MANNED SPACEFLIGHT

二〇一八年 第24卷 第五期

中国载人航天工程办公室



ISSN 1674-5825



 中国载人航天工程办公室 主办
CMS China Manned Space Agency

万方数据

目次

基础研究

- 面向大型载人航天器的系统健康状态评估方法研究 陈润锋, 杨宏 (561)
- 组合型气囊参数对缓冲特性的影响分析 李建阳, 周宇, 王红岩, 竺梅芳 (568)
- 低功率电弧加热发动机内流动、传热与传质的数值计算 何青松, 朱涛, 耿金越, 沈岩, 王海兴 (574)
- 火星大气非平衡条件下驻点热流计算公式的探讨 刘方彬, 袁军娅 (582)
- 载人深空探测被动屏蔽优化仿真研究 杨涛, 于梅, 牛睿, 蔡明辉, 韩建伟 (590)
- 载人航天任务固废处理技术初筛评价方法研究 张良长, 武重阳, 艾为党, 张春艳, 张平, 杨国威 (596)
- 力封闭虚拟手抓持规则研究 邹俞, 晁建刚, 林万洪 (603)
- 单片集成自装配微爬机器人研究 周岁, 张卫平, 欧彬, 寻之宇 (611)
- 串并联混合型末端执行器设计与柔顺控制研究 汤奇荣, 张凌楷, 李宁, 邹怀武, 黎杰 (618)
- 地月空间信息网络体系架构对比研究 孙晨华, 何辞, 张亚生, 卢山 (624)
- 基于地月 L2 点中继星的月球背面目标定位误差分析 桂林卿, 丛海波, 孙琳琳, 束锋, 陆锦辉 (630)

工程技术

- 基于金属陶瓷堆芯 1000 kN 核热火箭发动机系统及组件参数研究 王浩泽, 李子亮, 吴宏雨, 马晓秋 (637)
- 模拟月尘 BHL D20 改进研究 孙浩, 高海洋, 沈志刚, 张晓静, 杨艳静 (643)
- 载人火星任务带电粒子辐射探测方案与应用技术研究 郝志华, 陈鸿飞, 贾晓宇, 李衍存 (649)
- 用于空间舱火灾预警的气体检测技术研究 屈子琪, 徐宇新, 姜萌, 任小孟, 王军龙 (654)
- 空间植物栽培关键技术地面验证试验研究 沈韫贻, 郭双生, 赵丕盛, 王隆基, 李健, 王晓霞 (662)
- 基于全景光学的 EVA 航天员视场拓展技术研究 于灏洋, 周军, 李娟 (669)
- 基于电子散斑干涉的载人航天器密封舱焊缝残余应力测试方法 张天驰, 张明, 李博, 孙利, 祁俊峰, 朱小溪 (674)
- 基于 PXI 总线的空间站对接机构自动测试系统硬件平台设计 陈超 (679)
- 载人密封舱内部设备安装结构的设计及验证 陈燕, 姜超, 施丽铭, 梁东平 (684)
- 热真空条件下二浮 IMU 电子箱热设计 程耀强, 郭林肖, 潘光, 郭秦, 黄刚, 郭红军 (690)

信息研究

- 2017 年国际空间站科研与应用进展 韩淋, 范唯唯, 杨帆, 王海名 (697)

MANNED SPACEFLIGHT

Vol. 24 No. 5 (Sum 85) 2018

CONTENTS

BASIC RESEARCH

- Research on System Health State Assessment Method for Large-Scale Manned Spacecraft CHEN Runfeng, YANG Hong(561)
- Effects of Combined Airbag Parameters on Cushioning Characteristics LI Jianyang, ZHOU Yu, WANG Hongyan, ZHU Meifang(568)
- Modeling Study on Flow, Heat Transfer and Mass Transfer in a Low Power Arcjet Thruster HE Qingsong, ZHU Tao, GENG Jinyue, SHEN Yan, WANG Haixing(574)
- Discussion on Calculation Formula of Stagnation Heat flux in Martian Atmosphere under Non-equilibrium Condition LIU Fangbin, YUAN Junya(582)
- Simulation Study on Passive Shielding Optimization in Manned Deep Space Exploration YANG Tao, YU Mei, NIU Rui, CAI Minghui, HAN Jianwei(590)
- Study on Primary Screening Method for Solid Waste Treatment Technology in Manned Space Missions ZHANG Liangchang, WU Chongyang, AI Weidang, ZHANG Chunyan, ZHANG Ping, YANG Guowei(596)
- Research on Virtual Hand Grasping Rules Based on Force Closure ZOU Yu, CHAO Jiangang, LIN Wanhong(603)
- Research on Monolithic Integrated Self-assembly Micro Crawling Robot ZHOU Sui, ZHANG Weiping, OU Bin, XUN Zhiyu(611)
- Structure Design and Compliance Control of Serial-parallel Hybrid End-effector in Space Manipulator TANG Qirong, ZHANG Lingkai, LI Ning, ZOU Huaiwu, LI Jie(618)
- Comparison Study on Architectures of Earth-Moon Space Information Network SUN Chenhua, HE Ci, ZHANG Yasheng, LU Shan(624)
- Analysis of Target Location Errors at Far Side of Moon based on Earth-Moon L2 Satellite GUI Linqing, CONG Haibo, SUN Linlin, SHU Feng, LU Jinhui(630)

ENGINEERING TECHNOLOGY

- Thruster System and Component Parameters of a 1000 kN Nuclear Thermal Rocket Thruster Based on Ceramic-Metallic Reactor Core WANG Haoze, LI Ziliang, WU Hongyu, MA Xiaoqiu(637)
- Study on Improvement of Lunar Dust Simulant BHL20 SUN Hao, GAO Haiyang, SHEN Zhigang, ZHANG Xiaojing, YANG Yanjing(643)
- Research on Detection Scheme and Application Technology of Charged Particle Radiation Detection Scheme Manned Mars Missions HAO Zhihua, CHEN Hongfei, JIA Xiaoyu, LI Yancun(649)
- Research on Gas Detection Technologies for Fire Early Warning in Space Cabin QU Ziqi, XU Yuxin, JIANG Meng, REN Xiaomeng, WANG Junlong(654)
- Research on Ground-Based Validation Test for Plant Cultivation in Space SHEN Yunze, GUO Shuangsheng, ZHAO Pisheng, WANG Longji, LI Jian, WANG Xiaoxia(662)
- Research on FOV Extension for EVA Astronaut Based on Panoramic Annular Optical System YU Haoyang, ZHOU Jun, LI Juan(669)
- Testing Method for Residual Stress in Welds of Manned Spacecraft Cabin Based on Electronic Speckle Pattern Interferometry ZHANG Tianchi, ZHANG Ming, LI Bo, Sun Li, QI Junfeng, ZHU Xiaoxi(674)
- Design of Hardware Platform in Automatic Test System for Space Station Docking Mechanism Based on PXI Bus CHEN Chao(679)
- Design and Verification of Installation Structure of Internal Equipment in Manned Capsule CHEN Yan, JIANG Chao, SHI Liming, LIANG Dongping(684)
- Thermal Design of Two-bearing Inertial Measurement Unit (IMU) Electronic Circuit Box under Thermal Vacuum Condition CHENG Yaoqiang, GUO Linxiao, PAN Guang, GUO Qin, HUANG Gang, GUO Hongjun(690)

INFORMATION RESEARCH

- Review of Scientific Research and Application on the International Space Station in 2017 万方数据 HAN Lin, FAN Weiwei, YANG Fan, WANG Haiming(697)