

郑无天返回与遥感



航天返回与遥感

HANGTIAN FANHUI YU YAOGAN

(1980年创刊)

(双月刊)

第 42 卷第 3 期 (总第 189 期)

2021年6月出版

目 次

火星探测技术

| "天问一号"火星环绕器总体设计综述朱新波,谢攀,徐亮,杜洋 | (1) |
|--|-------|
| 火星精确着陆轨迹优化与制导技术研究进展 龙嘉腾, 葛丹桐, 崔平远 | (13) |
| "天问一号"探测器舱体抛离试验系统设计与验证 | |
| | (23) |
| 火星 EDL 过程动力学仿真平台唐明章, 王奇, 黄伟, 钱凯 | (32) |
| 进入、减速、着陆与上升技术 | |
| 环帆伞技术与发展综述 贾华明, 杨霞, 李少腾, 牛国永, 林汝领, 刘乃彬 | (41) |
| 新飞船试验船气囊着陆缓冲系统特性研究竺梅芳,武士轻,李博 | (52) |
| 某拔销器工作过程仿真分析及优化设计 张威, 刘群, 任法璞, 刘新伟, 杨昭, 周传霞 | (62) |
| 遥感技术 | |
| 光学反射镜组件离子束加工中的热效应王永刚,李昂,孟晓辉,李文卿,张继友 | (72) |
| 高次非球面镜面低温面形拟合方法研究 童卫明, 白绍竣 | (79) |
| 一种兼具卫星舱板功能的相机承力板设计范俊杰, 吕秋锋, 宁晓周, 靳利锋, 任海培 | (88) |
| 面向制造的复杂光学遥感器全三维设计范慧莉, 刘丽玲, 吴艳华, 车颖, 孔庆乐 | (98) |
| 数据处理与应用技术 | |
| 面向小样本遥感解译的空间置弃 FCN 模型… 陈岩, 奚砚涛, 万家华, 王晓峰, 徐立祥, 孟禹弛 | (107) |
| 基于视觉显著性和卷积神经网络的机场目标快速检测张一民, 韩现伟, 张世超, 高伟 | (117) |
| 星地协同光学遥感影像目标识别技术验证研究 薛武, 赵玲, 王鹏 | (128) |
| 基于全局—局部特征联合的光学卫星遥感图像舰船目标细粒度识别 | |
| ·····李孟洋, 孙炜玮, 张筱晗, 姚立波 | (138) |

期刊基本参数: CN11-4532/V * 1980 * B * 16 * 147 * zh * P * \(\frac{1}{2} \) 2021-06 刊名题字: 宋健

Spacecraft Recovery & Remote Sensing

Vol. 42 No. 3 (Cumulative 189) Jun. 2021

Contents

| Mars Exploration Technology | |
|--|------|
| Summary of the Overall Design of Mars Orbiter of Tianwen-1 | |
| | (1 |
| Overview of Mars Pinpoint Landing Trajectory Optimization and Guidance Techniques Research | |
| LONG Jiateng, GE Dantong, CUI Pingyuan | (13 |
| Design and Verification of Tianwen-1 Probe Cabin Separation Test System · · · · · · · · · · · · · · · · · · · | |
| ······FENG Wei, YI Wangmin, YANG Wang, LI Qunzhi, HOU Senhao, ZHENG Shengyu, MENG Fanwei | (23 |
| Mars EDL Process Dynamic Simulation Platform | |
| ······TANG Mingzhang, WANG Qi, HUANG Wei, QIAN Kai | (32 |
| The Entry, Decent, Landing and Ascent Technology | |
| Overview of the Technology and Development of Ringsail Parachute · · · · · · · · · · · · · · · · · · · | |
| JIA Huaming, YANG Xia, LI Shaoteng, NIU Guoyong, LIN Ruling, LIU Naibin | (41 |
| Research on Characteristics of Airbag Landing Attenuation System for New-generation Manned Test Spacecraft | |
| ZHU Meifang, WU Shiqing, LI Bo | (52 |
| Simulation Analysis and Optimization Design of a Pin Puller | |
| ZHANG Wei, LIU Qun, REN Fapu, LIU Xinwei, YANG Zhao, ZHOU Chuanxia | (62 |
| Remote Sensing Technology | |
| Thermal Effect in Ion Beam Figuring of Optical Mirror Assembly | |
| | (72 |
| Research on Cryogenic Aspheric Surface Error Fitting Methods · · · · · · · · · · · · · · · · · · · | |
| | (79 |
| Design of a Bearing Plate with the Functions of Both Camera and Satellite Module | |
| ·····FAN Junjie, LYU Qiufeng, NING Xiaozhou, JIN Lifeng, REN Haipei | (88) |
| The Full 3D Design of Complex Optical Remote Sensor for Manufacturing · · · · · · · · · · · · · · · · · · · | |
| FAN Huili, LIU Liling, WU Yanhua, CHE Ying, KONG Qingle | (98 |
| Remote Sensing Information and Application Technology | |
| A Spatial Dropout Integrated FCN for Remote Sensing Interpretation Using the Small-scale Dataset · · · · · · · · · · · · · · · · · · · | |
| CHEN Yan, XI Yantao, WAN Jiahua, WANG Xiaofeng, XU Lixiang, MENG Yuchi | (107 |
| Rapid Detection of Airport Targets Based on Visual Saliency and Convolutional Neural Network · · · · · · · · · · · · · · · · · · · | |
| ZHANG Yimin, HAN Xianwei, ZHANG Shichao, GAO Wei | (117 |
| Satellite-earth Coordinated On-orbit Intelligent Target Recognition of Optical Remote Sensing Images | |
| XUE Wu, ZHAO Ling, WANG Peng | (128 |
| Fine-grained Recognition of Ship Targets in Optical Satellite Remote Sensing Images Based on Global-local Features | |
| LI Mengyang, SUN Weiwei, ZHANG Xiaohan, YAO Libo | (138 |