

ISSN 1672-9242
CN 50-1170/X

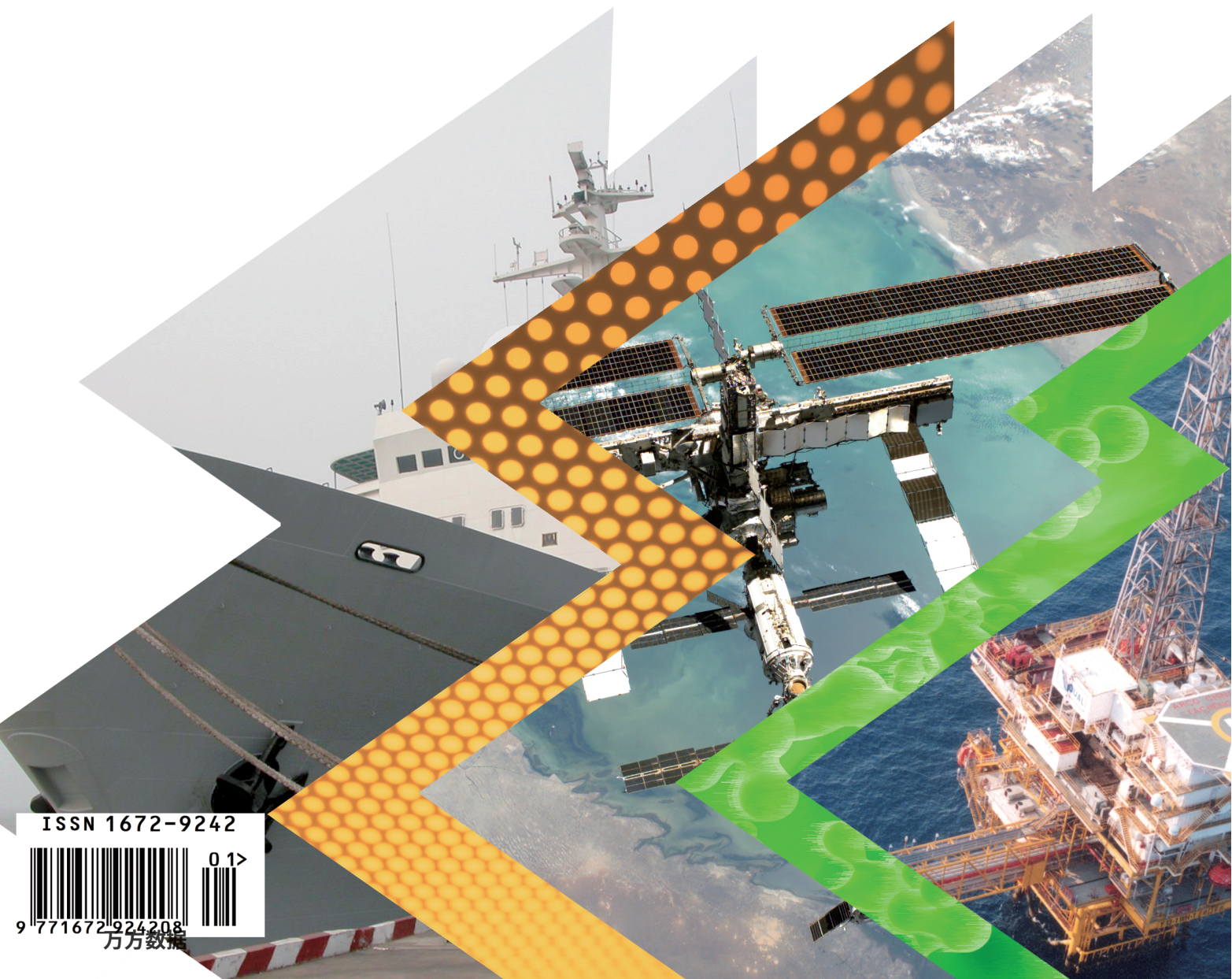
装备环境工程

Equipment Environmental Engineering

中国科技核心期刊

第17卷 第1期 2020年1月

主办单位：中国兵器工业第五九研究所
国防科技工业自然环境试验研究中心



ISSN 1672-9242
9 771672 924208
0 1>
万方数据

目次 CONTENTS

专题——临近空间服役环境及其与飞行器材料的耦合研究

Special Topic—Near Space Service Environment and Its Coupling with Air Vehicle Material

1 临近空间环境对飞艇蒙皮织物材料力学性能的影响研究

Effect of Near Space Environment on Mechanical Properties of Airship Envelope Woven Materials

马瑞强, 王长国, 谭惠丰

MA Rui-qiang, WANG Chang-guo, TAN Hui-feng

6 温度对平流层飞艇囊体材料渗透性能的影响

Effect of Temperature on the Permeability of Stratospheric Airship Capsule Material

袁明清, 赵海涛, 陈政, 李若薇, 陈吉安

YUAN Ming-qing, ZHAO Hai-tao, CHEN Zheng, LI Ruo-wei, CHEN Ji-an

13 平流层飞艇昼夜驻空蒙皮热特性研究

Thermal Characteristics Analysis of Stratospheric Airships Envelope

王晓亮, 谢炜程

WANG Xiao-liang, XIE Wei-cheng

20 减缓 Vectran 纤维光辐照降解的涂层防护研究

Coating Protection Against Photodegradation of Vectran Fibers

刘羽熙, 刘宇艳, 王长国, 谭惠丰

LIU Yu-xi, LIU Yu-yan, WANG Chang-guo, TAN Hui-feng

25 平流层飞艇螺旋桨布局对蒙皮表面对流换热系数影响数值仿真研究

Numerical Simulation on Influences of Stratospheric Airships Envelope with Different Layouts of Propeller on Convective Heat Transfer Coefficient on Envelope

张宇, 谢炜程, 王晓亮

ZHANG Yu, XIE Wei-cheng, WANG Xiao-liang

31 新型长时热流测量装置的研制及应用

Application and Development of a Novel Device for Long Time Heat-flow Measurement

刘国仟, 李宇, 刘宇飞, 徐晓亮, 崔占中, 周禹

LIU Guo-qian, LI Yu, LIU Yu-fei, XU Xiao-liang, CUI Zhan-zhong, ZHOU Yu

36 临近空间飞行器防隔热/承载一体化热结构设计及力/热行为

Design and Thermomechanical Behavior of Full-composite Structurally Integrated Thermal Protection Structure for Near Space Vehicles

时圣波, 唐硕, 梁军

SHI Sheng-bo, TANG Shuo, LIANG Jun

43 二氧化碳介质气动加热环境下碳化热解类防热材料烧蚀机理分析

Impact of Carbon Dioxide Aeroheating on the Ablation Performance of Charring Thermal Protective Materials

邓代英, 罗晓光, 陈思员, 俞继军, 艾邦成

DENG Dai-ying, LUO Xiao-guang, CHEN Si-yuan, YU Ji-jun, AI Bang-cheng

51 石英灯辐射加热条件下低密度碳/酚醛复合材料高温响应及分析

High Temperature Response and Analysis of Low Density Carbon Fiber/Phenolic Composites under Quartz Lamp Radiation Heating

张军, 许阳阳, 张运法, 洪长青, 方国东

ZHANG Jun, XU Yang-yang, ZHANG Yun-fa, HONG Chang-qing, FANG Guo-dong

58 纤维增强气凝胶复合材料高温结构转变及热稳定性研究

Structural Changes and Thermal Stability of Fiber Reinforced Aerogel Composites

赵淑媛, 董江龙, 孙新杨

ZHAO Shu-yuan, DONG Jiang-long, SUN Xin-yang

63 陶瓷基复合材料连接结构失效分析方法

Failure Analysis Method of Ceramic Matrix Composite Joint Structures

刘宝瑞, 侯传涛, 赵丽滨, 吴建国, 高魁垠

LIU Bao-rui, HOU Chuan-tao, ZHAO Li-bin, WU Jian-guo, GAO Kui-yin

- 71 C/SiC 复合材料波纹点阵结构进气道前缘设计与制备
Design and Preparation of Inlet Leading Edge with Corrugated Lattice Structure of C/SiC Composites
陈彦飞, 艾士刚, 何汝杰, 成凤, 徐宝升
CHEN Yan-fei, AI Shi-gang, HE Ru-jie, CHENG Su, XU Bao-sheng
- 77 界面层对纤维增韧陶瓷基复合材料力学性能影响的研究进展
Effect of Interfacial Layer on Mechanical Properties of Fiber Toughened Ceramic Matrix Composites
王章文, 张军, 方国东, 孟松鹤
WANG Zhang-wen, ZHANG Jun, FANG Guo-dong, MENG Song-he
- 90 超级爆炸喷涂镍基钴基涂层高温氧化及摩擦磨损性能
High Temperature Oxidation and Friction Behavior of Nickel Based and Cobalt Based Coating Deposited by Super Detonation Spray
王长亮, 崔永静, 汤智慧, 陆峰
WANG Chang-liang, CUI Yong-jing, TANG Zhi-hui, LU Feng

环境试验与评价 Environmental Testing and Evaluation

- 97 美国海军全舰船电磁脉冲生存能力试验与鉴定研究进展
Research Progress in the U.S. Navy Full Ship Electromagnetic Pulse Survivability Test & Evaluation
冯寒亮, 毛从光, 吴刚, 孙蓓云
FENG Han-liang, MAO Cong-guang, WU Gang, SUN Bei-yun
- 105 高能装药飞行器试验安全风险
Risk Analysis on Test Safety of High Energy Propelled Vehicle
徐松林, 郭涛
XU Song-lin, GUO Tao
- 109 电子设备热管冷板优化设计及试验研究
Optimization Design and Experimental Study on Heat Pipe Cold Plate for Electronic Equipment
曾乐业, 李翔
ZENG Le-ye, LI Xiang
- 114 油气田在役管道高后果区识别与完整性评价方法
Method for High-consequence Area Identification and Integrity Evaluation of Oil and Gas Pipelines in Service
杨春林, 袁镜清, 张爱良, 宫彦双, 郝晓东, 杨云成
YANG Chun-lin, YUAN Jing-qing, ZHANG Ai-liang, GONG Yan-shuang, HAO Xiao-dong, YANG Yun-cheng
- 119 气候环境实验室降雪环境模拟技术研究
Technology on Snow Simulation in Climatic Environment Test Facility
任战鹏, 吴敬涛, 吴学敏, 成竹
REN Zhan-peng, WU Jing-tao, WU Xue-min, CHENG Zhu

环境适应性设计与分析 Design and Analysis of Environmental Adaptation

- 124 火箭弹多模导引头对复杂气象环境适用性研究
Applicability of Rocket Multi-mode Seeker to Complex Meteorological Environment
房施东, 宁全利, 陈栋, 唐正, 张杰
FANG Shi-dong, NING Quan-li, CHEN Dong, TANG Zheng, ZHANG Jie

环境效应与防护 Environmental Effects and Protection

- 130 纳米涂层/铝合金在不同 pH 值的海水溶液中的腐蚀行为研究
Corrosion Behavior of Nano-coating/Aluminum Alloy in Seawater Solution with Different pH Values
慕仙莲, 解鹏飞, 金涛, 张登, 赵连红, 王浩伟, 廖圣智
MU Xian-lian, XIE Peng-fei, JIN Tao, ZHANG Deng, ZHAO Lian-hong, WANG Hao-wei, LIAO Sheng-zhi

广告索引

封底
东莞市众志检测仪器有限公司
封二
重庆银河试验仪器有限公司
封三
广东莱伯通试验设备有限公司

封三前
1. 重庆哈丁环境试验技术股份有限公司
2. 中国兵器工业第五九研究所
3. 国防科技工业自然环境试验研究中心
4. 《装备环境工程》杂志理事会名单

期刊基本参数: CN 50-1170/X*1983*m*A4*138*zh*P*¥ 45.00*5000*21*2020-1