

目次 CONTENTS

专题——石油管材及关键装备腐蚀与防护

Special Topic——Corrosion and Protection Technology for Petroleum Tubes and Equipment

1 油气田微生物腐蚀与防护研究进展

Research Progress of Microbial Corrosion and Protection in Oil and Gas Fields

刘宏伟, 陈翠颖, 张雨轩, 李伟华

LIU Hong-wei, CHEN Cui-ying, ZHANG Yu-xuan, LI Wei-hua

10 元素硫对 825 合金在高温高压含 CO₂/H₂S 环境中腐蚀行为的影响

Effect of Elemental Sulfur on the Corrosion of 825 Alloy in High Temperature and High Pressure Environment Containing CO₂/H₂S

李科, 李天雷, 施岱艳, 李九一, 郑子奇, 钟显康

LI Ke, LI Tian-lei, SHI Dai-yan, LI Jiu-yi, ZHENG Zi-qi, ZHONG Xian-kang

18 高温高压高含 CO₂ 环境下两种氟橡胶密封可靠性评价

Evaluation on Sealing Reliability of Two Kinds of Fluorinated Rubber in High Temperature, High Pressure and High CO₂ Environment

李天雷, 曹大勇, 李科, 钟洋, 姜放, 曾德智

LI Tian-lei, CAO Da-yong, LI Ke, ZHONG Yang, JIANG Fang, ZENG De-zhi

24 硫磺回收装置腐蚀机理与防护分析

Corrosion Mechanism and Protection of Sulfur Recovery Unit

袁辉, 王会强

YUAN Hui, WANG Hui-qiang

31 定向钻穿越管道阴极保护数值模拟评价方法

Numerical Simulation Method for Cathodic Protection Evaluation of HDD Pipeline

徐华天, 杨威, 温玉芬, 毕武喜

XU Hua-tian, YANG Wei, WEN Yu-fen, BI Wu-xi

37 油田化学添加剂对污水处理系统腐蚀行为的影响

Effect of Oilfield Chemical Additives on Corrosion Behavior of Sewage Treatment System

李玲杰, 苏碧煌, 黄桂柏, 张彦军, 王志涛

LI Ling-jie, SU Bi-huang, HUANG Gui-bai, ZHANG Yan-jun, WANG Zhi-tao

44 浅析渣油催化裂化装置腐蚀与防护

Catalytic Cracking Unit Corrosion and Protection

张俊猛, 肖扬, 孟令栋, 周明慧, 陈东岩

ZHANG Jun-meng, XIAO Yang, MENG Ling-dong, ZHOU Ming-hui, CHEN Dong-yan

52 螺纹接头处拉应力作用下的缝隙腐蚀行为

Crevice Corrosion at Screwed Joint with Tensile Stress

钟显康, 郑子奇, 莫林, 卿阳, 喻丝雨, 扈俊颖

ZHONG Xian-kang, ZHENG Zi-qi, MO Lin, QING Yang, YU Si-yu, HU Jun-ying

60 高温高含二氧化碳条件下五种含 Cr 钢适用性评价

Evaluation of Applicability of Five Cr-containing Steels at High Temperature and High Carbon Dioxide

高搏, 钟洋, 赵格, 程地奎, 同航, 曾德智

GAO Bo, ZHONG Yang, ZHAO Ge, CHENG Di-kui, TONG Hang, ZENG De-zhi

环境试验与评价 Environmental Testing and Evaluation

66 太阳模拟器大功率短弧氙灯放电特性试验测试

Experimental Test on Discharge Characteristics of High Power Short Arc Xenon Lamp of Solar Simulator

宁娟, 邵静怡, 顾志飞, 刘高同

NING Juan, SHAO Jing-yi, GU Zhi-fei, LIU Gao-tong

71 硅橡胶自然环境加速试验方法与自然环境试验方法等效性研究

Equivalence between Natural Environmental Accelerated Test Methods and Natural Environmental Test Methods of Silicone Rubber

肖敏, 赵全成, 杨华明, 符朝旭, 罗丹, 杨万均

XIAO Min, ZHAO Quan-cheng, YANG Hua-ming, FU Zhao-xu, LUO Dan, YANG Wan-jun

79 结冰条件下直升机飞行风险模糊综合评估
Fuzzy Comprehensive Evaluation of Helicopter Flight Risk under Icing Conditions

唐扬刚, 张惠, 吴敬涛

TANG Yang-gang, ZHANG Hui, WU Jing-tao

85 基于 ZJU400 土工离心机的 CFD 模拟方法
CFD Simulation Method Based on ZJU400 Geotechnical Centrifuge

郭轶楠, 杨毅, 王亚林, 余俊祥, 丁德

GUO Yi-nan, YANG Yi, WANG Ya-lin, YU Jun-xiang, DING De

90 横向侧风及反推气流对安装状态下发动机进口流场影响的数值研究
Numerical Investigation on Influence of Vertical Crosswind and Reverser Flow to Engine Inlet Flow Field under Installation

代小强, 张云, 黄强, 谢兰川

DAI Xiao-qiang, ZHANG Yun, HUANG Qiang, XIE Lan-chuan

96 嵌入局域共振单元宽频减振降噪蜂窝夹层结构研究进展
Research Progress on Broadband Vibration and Noise Reduction Honeycomb Sandwich Structure Embedded with Local Resonance Unit

陈洋, 吴永鹏, 李忠盛, 黄安畏, 李晓晖, 吴道勋, 舒露, 花泽荟, 董玲抒, 孙彩云

CHEN Yang, WU Yong-peng, LI Zhong-sheng, HUANG An-wei, LI Xiao-hui, WU Dao-xun,

SHU Lu, HUA Ze-hui, DONG Ling-shu, SUN Cai-yun

环境效应与防护 Environmental Effects and Protection

103 几种表面防护体系耐盐雾性能研究
Salt Spray Corrosion Resistance of Several Surface Protection Systems

李超

LI Chao

108 Al 涂层修复对 DD5 合金性能的影响
Effect of Al Coating Repair on Properties of DD5 Alloy

蔡妍, 李建平, 汤智慧, 牟仁德

CAI Yan, LI Jian-ping, TANG Zhi-hui, MU Ren-de

114 飞机电连接器腐蚀外场检查与处理要求研究
Requirements on Out-field Corrosion Inspection and Treatment of Aircraft's Electrical Connector

王琳, 郁大照, 王希彬, 张涛

WANG Lin, YU Da-zhao, WANG Xi-bin, ZHANG Tao

119 某高速船用齿轮箱油泵连接套失效机理研究
Failure Mechanism of Connecting Sleeve of a High-Speed Marine Gearbox Oil Pump

王斌, 刘演龙, 冯健

WANG Bin, LIU Yan-long, FENG Jian

125 铌合金表面热防护涂层研究进展
Progress in Research on Thermal Protective Coatings of Niobium-based Alloys

张霞, 张晶, 柳岩, 李然, 侯军, 白懿心, 丛大龙

ZHANG Jing, ZHANG Xia, LI Ran, HOU Jun, BAI Yi-xin, CONG Da-long

装备通用质量特性及寿命评估

General Quality Characteristics and Life Assessment of Equipment

132 弹上火工品报废处理技术研究
Scrap Disposal Technology for Initiating Explosive Devices of Missile

齐伟

QI Wei

137 报废轻武器毁形方法研究
Destruction Method of Scrapped Light Weapons

刘延春, 皇甫列锋, 王维, 孙忠一, 张意隆

LIU Yan-chun, HUANGFU Lie-feng, WANG Wei, SUN Zhong-yi, ZHANG Yi-long

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. 重庆阿泰可科技股份有限公司
4. 国防科技工业自然环境试验研究中心
5. 《装备环境工程》杂志介绍
6. 《装备环境工程》杂志理事会名单