

目次 CONTENTS

专题——金属材料土壤腐蚀及控制技术

Special Topic——Soil Corrosion and Control Techniques for Metallic Materials

1 埋地阴极保护管线的交流干扰腐蚀

Research on AC Interference Corrosion of Buried Pipeline with Cathodic Protection

闫茂成, 石薇, 王彬彬

YAN Mao-cheng, SHI Wei, WANG Bin-bin

9 高压直流输电系统对埋地管道干扰及防护研究进展

Research Progress on Interference on the Pipeline Caused by HVDC Transmission

姜子涛, 董绍华, 刘冠一, 汪麟, 董廷涛, 张玉楠

JIANG Zi-tao, DONG Shao-hua, LIU Guan-yi, WANG Lin, DONG Ting-tao, ZHANG Yu-nan

21 交流杂散电流对 X80 管线钢的腐蚀行为影响

Effect of AC Stray Current on Corrosion Behavior of X80 Pipeline Steel

韦博鑫, 许进, 高立群, 台闯, 于长坤, 孙成, 王振尧

WEI Bo-xin, XU Jin, GAO Li-qun, TAI Chuang, YU Chang-kun, SUN Cheng, WANG Zhen-yao

28 埋地钢质管道阴极保护电绝缘测试方法应用分析

Analysis on Application of Electric Insulation Testing of Cathodically Protected Underground Steel Pipelines

陈振华, 程玉魁, 高俊涛, 满秀清, 解晓博

CHEN Zhen-hua, CHENG Yu-kui, GAO Jun-tao, MAN Xiu-qing, XIE Xiao-bo

33 地铁运行状态变化下杂散电流对埋地管道干扰数值模拟

Numerical Simulation of Stray Current Interference Rules on Buried Pipeline from Metro System under Different Operative Modes

董亮, 陈金泽, 姚知林, 石超杰

DONG Liang, CHEN Jin-ze, YAO Zhi-lin, SHI Chao-jie

43 成品油管道基于内检测的适用性评价与维修决策

The Fitness-for-service Assessment and Maintenance Decision-making of a Refined Oil Pipeline

李明, 杨文, 牛彻, 杜威, 杨璐

LI Ming, YANG Wen, NIU Che, DU Wei, YANG Jing

50 埋地成品油管道绝缘接头漏电失效特征分析

Analysis on Current Leakage Failure of Insulation Joints of Buried Oil & Gas Pipeline

施展, 兰才富, 王彬彬, 霍冠良, 王湘岳, 闫茂成

SHI Zhan, LAN Cai-fu, WANG Bin-bin, HUO Guan-liang, WANG Xiang-yue, YAN Mao-cheng

环境试验与评价 Environmental Testing and Evaluation

57 基于数智孪生的装备全周期敏捷试验技术

Digital-intelligence Twins based Full-cycle Agile Test Technology of Equipment

左毅, 樊志强, 曹江, 徐珞

ZUO Yi, FAN Zhi-qiang, CAO Jiang, XU Luo

64 先进增强结构仿真分析与实验研究

Finite Element Simulation and Experimental Study of Advanced Reinforced Structures

韦利军, 赵连红, 张红飞, 金涛, 刘元海, 王浩伟

WEI Li-jun, ZHAO Lian-hong, ZHANG Hong-fei, JIN Tao, LIU Yuan-hai, WANG Hao-wei

70 铝合金化学氧化膜盐雾试验后腐蚀点评定方法研究

Corrosion Evaluation Method of Aluminum alloy Chemical Oxidation Film after Salt Spray Test

郑洪, 彭涛, 舒畅, 杨燕, 王辉

ZHENG Hong, PENG Tao, SHU Chang, YANG Yan, WANG Hui

77 GJB 150.28—2009 酸性大气试验应用中存在的问题探讨

Discussion of Existing Problems in Application of GJB 150.28—2009 Acidic Atmosphere Test

熊伊, 张钧天, 杨欣磊

XIONG Yi, ZHANG Jun-tian, YANG Xin-lei

82 某型金属减振器的加速贮存验证试验方法研究
Research on Accelerated Storage Validation Test Method of a Certain Type Metal Damper
宫晓春, 秦玉灵, 赵薇, 李昊宇
GONG Xiao-chun, QIN Yu-ling, ZHAO Wei, LI Hao-yu

88 随机数据相干函数谱的归纳处理方法研究
Research on Inductive Method of Random Data Coherence Function Spectrum
邹学利, 张国强, 王刚, 张生鹏
ZOU Xue-li, ZHANG Guo-qiang, WANG Gang, ZHANG Sheng-peng

环境及其效应 Environment and Its Effect

96 地下车库氡迁移的数值模拟研究
Research on Numerical Simulation of Radon Distribution in Underground Garage
孟德雨, 王汉青, 李铨骏
MENG De-yu, WANG Han-qing, LI Cheng-jun

103 III型储氢气瓶内胆 6061-T6 铝合金的氢致损伤研究进展
Research Progresses of Hydrogen Induced Damage of the 6061-T6 Alloy Used as Liner of Type III Hydrogen Storage Cylinder
滕越, 陈国宏, 魏金韬, 缪春辉, 汤文明
TENG Yue, CHEN Guo-hong, WEI Jin-tao, MIAO Chun-hui, TANG Wen-ming

109 基于结构应变监测的风帆推力测量方法研究
Study on the Measurement Method of Sail-assisted Thrust Based on Structural Strain Monitoring
杨华伟, 汪雪良, 张涛, 陈立, 徐春, 郑庆新
YANG Hua-wei, WANG Xue-liang, ZHANG Tao, CHEN Li, XU Chun, ZHENG Qing-xin

115 低轨道卫星表面电位探测器探测数据分析
Analysis of Data from Surfacing Charging Detector on Board a LEO Satellite
田天, 常峥, 孙凌峰, 张根生, 杨晓华, 高泽
TIAN Tian, CHANG Zheng, SUN Ling-feng, ZHANG Gen-sheng, YANG Xiao-hua, GAO Ze

环境效应与防护 Environmental Effects and Protection

122 三种除锈方式对 Q235 钢表面涂层耐蚀性能的影响
Influence of Three Derusting Methods on the Corrosion Resistance of Q235 Steel Surface Coating
丁永志, 王浩伟, 韦利军, 刘元海, 王广超, 王媛媛
DING Yong-zhi, WANG Hao-wei, WEI Li-jun, LIU Yuan-hai, WANG Guang-chao, WANG Yuan-yuan

128 基于 PSD 曲线的军用车辆有机涂层防护性能研究
Research on Protective Performance of Organic Coatings for Military Vehicles Based on PSD Curve
周慧, 徐安桃, 封会娟, 魏骏逸
ZHOU Hui, XU An-tao, FENG Hui-juan, WEI Jun-yi

装备通用质量特性及寿命评估

General Quality Characteristics and Life Assessment of Equipment

133 基于故障物理的集成控制器电路板可靠性预计
Reliability Prediction for Integrated Controller Circuit Board Based on Physics of Failure
刘凌, 孙富强, 章桐
LIU Ling, SUN Fu-qiang, ZHANG Tong

广告索引

封底	封三前
东莞市众志检测仪器有限公司	1. 重庆哈丁环境试验技术股份有限公司
封二	2. 中国兵器工业第五九研究所
重庆银河试验仪器有限公司	3. 装备环境工程
封三	4. 国防科技工业自然环境试验研究中心
广东莱伯通试验设备有限公司	