

目 次 CONTENTS

膜层技术 Coating Technology

1 超音速微粒沉积的颗粒连续沉积过程及模拟研究

Study of Experimental and Numerical Simulation of Continuous Forming Coating by Supersonic Particle Deposition 周超极, 任智强, 王晓明, 朱胜, 王启伟

ZHOU Chao-ji, REN Zhi-qiang, WANG Xiao-ming, ZHU Sheng, WANG Qi-wei

6 半胱氨酸亚金钠的理化性质及化镍金工艺研究

Physical and Chemical Properties of NaAu(Cys)₂ · 3H₂O and Technology Research on Electroless Nickel/Immersion Gold 刘慧敏, 盛国军, 李德良, 黄世玉, 刘慎, 杨焰

LIU Hui-min, SHENG Guo-jun, LI De-liang, HUANG Shi-yu, LIU Shen, YANG Yan

11 氧化镱对碳钢表面化学镀 Ni-Zn-P 合金的影响

Effects of Ytterbium Oxide on Electroless Plating Ni-Zn-P Alloy on Surface of Low Carbon Steel 万丽娟, 蒋柏泉, 魏林生

WAN Li-juan, JIANG Bo-quan, WEI Lin-sheng

16 硫脲对 304 不锈钢镀镍层抗腐蚀性能的影响

Effect of Thiourea on Corrosion Resistance of Ni Coatings on the Surface of 304 Stainless Steel 李庆余, 范海林, 陈家荣, 陈肇开, 王红强, 黄有国

LI Qing-yu, FAN Hai-lin, CHEN Jia-rong, CHEN Zhao-kai, WANG Hong-qiang, HUANG You-guo

23 一种可焊性半光亮镀镍工艺

Solderability of a Kind of a Semi-bright Nickel Plating Process 刘永永, 刘涛涛, 陈月华, 袁礼华, 江德凤, 朱俊昊

LIU Yong-yong, LIU Tao-tao, CHEN Yue-hua, YUAN Li-hua, JIANG De-feng, ZHU Jun-hao

表面摩擦与润滑 Surface Friction and Lubrication

27 SiO₂ 对镁合金阴极电泳涂层耐磨性的影响

Effect of SiO₂ on the Abrasion Resistance of E-coatings on Magnesium Alloy 朱阮利, 张津, 高帅, 倪娜

ZHU Ruan-li, ZHANG Jin, GAO Shuai, NI Na

表面强化及功能化 Surface Strengthening and Functionalization

34 纳米 SiO₂ 表面“点击”化学法接枝共聚物

Copolymer Modified Nano-silica via 'Click' Chemistry 刘志雷, 周街胜, 周建萍, 刘光明

LIU Zhi-lei, ZHOU Jie-sheng, ZHOU Jian-ping, LIU Guang-ming

40 含铍碳化硅纤维的力学性能及其表面形貌研究

Mechanical Properties and Surface Morphology of SiC Fibers Containing Beryllium

施旸谷, 黄小忠, 杜作娟, 许慎微, 廖潘兴, 邹杨君

SHI Yang-gu, HUANG Xiao-zhong, DU Zuo-juan, XU Shen-wei, LIAO Pan-xing, ZOU Yang-jun

45 Mn掺杂SiC基稀磁半导体薄膜的结构和磁性研究

Investigation of Structure and Magnetic Properties of Mn-doped SiC Dilute Magnetic Semiconductors

孙现科, 周小东, 周思华, 王少辉, 蒋卫华, 孙春梅

SUN Xian-ke, ZHOU Xiao-dong, ZHOU Si-hua, WANG Shao-hui, JIANG Wei-hua, SUN Chun-mei

50 恒压电沉积Pt-Ni合金催化剂的形貌控制及其对催化剂性能的影响

Morphology Control of Pt-Ni Alloy Electrocatalysts Prepared by Potentiostatic Electrodeposition and Application in PEMFC Cathode

陈泽霖, 张华

CHEN Ze-lin, ZHANG Hua

56 钛基体表面多级孔洞结构的制备和生物活性研究

Preparation of Hierarchical Porous Structure on Ti Surface and Bioactivity

朱洪强, 何宏燕, 袁媛, 刘昌胜

ZHU Hong-qiang, HE Hong-yan, YUAN Yuan, LIU Chang-sheng

61 隔热保温涂料的研究发展及应用

Research Development and Application of Heat Insulation Coating

姚梦佳, 李春福, 何俊波, 罗平亚, 侯宇

YAO Meng-jia, LI Chun-fu, HE Jun-bo, LUO Ping-ya, HOU Yu

68 汽车零部件表面强化技术研究现状及展望

Research Status and Prospects of Surface Strengthening Technology of Auto Parts

答建成, 周细应, 周涛, 张有为, 杨涛

DA Jian-cheng, ZHOU Xi-ying, ZHOU Tao, ZHANG You-wei, YANG Tao

76 吸波涂层失效因素研究

Study on Factors Leading to Failure of Electromagnetic Wave Absorbing Coatings

殷宗莲, 周学梅, 王俊芳

YIN Zong-lian, ZHOU Xue-mei, WANG Jun-fang

表面失效及防护 Surface Failure and Protection

81 航空发动机叶片TiN/Ti涂层基体冲蚀响应数值模拟

Numerical Simulation on the Erosion Behavior of Aeroengine Blade Substrate with TiN/Ti Coating

张翼飞, 何光宇, 王学德, 何卫锋, 柴艳

ZHANG Yi-fei, HE Guang-yu, WANG Xue-de, HE Wei-feng, CHAI Yan

86 5083铝合金环氧涂层盐水浸泡失效研究

Study on Failure Process of Epoxy Coating on 5083 Aluminum Alloy under Salt Immersing Condition

方志刚, 贾芳科, 左禹, 唐聿明, 赵旭辉

FANG Zhi-gang, JIA Fang-ke, ZUO Yu, TANG Yu-ming, ZHAO Xu-hui

92 医用316L不锈钢表面多巴胺/BSA复合膜缓蚀性能研究

Corrosion Inhibition Performance of Composite Dopamine/BSA Film on Medical 316L Stainless Steel Surface

陈玉林, 屈钧娥, 王海人, 曹志勇

CHEN Yu-lin, QU Jun-e, WANG Hai-ren, CAO Zhi-yong

97 海洋风电重防腐涂料环氧玻璃鳞片的性能研究

Performance of the Heavy-duty Coating Epoxy Glass Flake

张瑞珠, 刘晓东, 蒲亚博, 卢伟

ZHANG Rui-zhu, LIU Xiao-dong, PU Ya-bo, LU Wei

103 3 种有机胺在盐酸溶液中的缓蚀性能对比研究

Comparative Study on the Inhibition Performance of Three Amines in HCl Solution

李晓杰, 郭庆行, 赵景茂

LI Xiao-jie, GUO Qing-xing, ZHAO Jing-mao

108 软化水中除氧剂与 pH 值对碳钢腐蚀率影响研究

Study on Effects of pH Value and Oxygen Scavenger on Corrosion Rate of Carbon Steel in Softened Water Solution

陈莉荣, 阚伟海, 姜庆宏, 王哲

CHEN Li-rong, KAN Wei-hai, JIANG Qing-hong, WANG Zhe

114 核电厂冷冻水系统更换缓蚀剂的可行性评估

Feasibility of Replacing Inhibitor for Chilled Water System of Nuclear Power Plant

谢建丽, 卢叶艇, 吴立新

XIE Jian-li, LU Ye-ting, WU Li-xin

表面质量控制及检测 Surface Quality Control and Detection

120 振动式滚磨光整加工过程中的受力测试与分析

Force Test and Analysis in the Process of Vibratory Barrel Finishing

张建丽, 李文辉, 张荔, 陈玉楠, 李唯东

ZHANG Jian-li, LI Wen-hui, ZHANG Li, CHEN Yu-nan, LI Wei-dong

125 拉矫参数对带钢氧化皮剥离及酸洗性能的影响

Influence of Descaling Parameters on the Spalling and Pickling Properties of Oxide Scales

叶东东, 邵素娟, 阴子良, 陈广, 陈建钧

YE Dong-dong, SHAO Su-juan, YIN Zi-liang, CHEN Guang, CHEN Jian-jun

131 超声振动珩磨表面残余应力数值模拟研究

Simulation Research on the Surface Residual Stress of Ultrasonic Vibration Honing

郑华林, 张伟

ZHENG Hua-lin, ZHANG Wei

信息与资讯 Information and Communication

137 《表面技术》投稿须知

广告索引

封二 无锡出新环保设备有限公司

书签

兴化市中天金属材料有限公司

封三 国防科技工业自然环境试验研究中心

太原特益达科技有限公司

封底 中国兵器工业第五九研究所(耐海水系列防腐涂料)

封二后

单色

A1 广东高力表面技术有限公司

B1 河北金日化工有限公司

A2 上海永华化学助剂有限公司

B2 长沙矿冶研究院。

A3 北京爱尔斯姆科技有限公司

B3 长沙市化工研究所

A4 中国兵器工业第五九研究所涂料工厂

B4 装备环境工程杂志

A5 第十二届全国摩擦学大会

A6 2015 年中国表面强化技术研讨会

A7 第二十八届中国国际表面处理展

A8 包装工程杂志