

1956年创刊

EI 收录期刊

中文核心期刊

ISSN 1001-4381

CODEN CAGOEW

材料工程

6 2020

JOURNAL OF MATERIALS ENGINEERING

第48卷 | Vol.48



ISSN 1001-4381



中国航发北京航空材料研究院 主办

万方数据

目 次

电磁超材料专栏

红外隐身超材料 刘晓明, 任志宇, 陈陆平, 李国建, 王 强, 周 济 (1)

太赫兹超材料及其成像应用研究进展 傅晓建, 石 磊, 崔铁军 (12)

基于人工电磁介质的宽带吸波器研究进展
..... 杜宏艳, 张子栋, 田 瑞, 张文锦, 张 剑, 刘昕宇, 孙 凯, 范润华 (23)

双曲超材料及其传感器研究进展 吴红亚, 杨 云, 张光磊, 白 洋, 周 济 (34)

铁磁/铁电复合介质及其超材料结构微波性能 郭鸿霞, 张家萌, 王青敏, 毕 科 (43)

综 述

人造固态电解质界面在锂金属负极保护中的应用研究
..... 齐 新, 王 晨, 南文争, 洪起虎, 彭思侃, 燕绍九 (50)

用于水体中有机污染物电催化降解的非贵金属氧化物阳极的研究进展
..... 唐长斌, 卢宇轩, 王 飞, 黄 平, 于丽花, 薛娟琴 (62)

超疏水防腐蚀涂层的研究进展 王 霞, 王 辉, 侯 丽, 蒋 欢, 周雯洁 (73)

氮化物吸波材料研究进展 崔 焱, 魏恒勇, 杨静凯, 朱 彬, 卜景龙, 梁 波 (82)

研究论文

花状 CdO 微球的制备及其对高氯酸铵热分解的催化性能 曾凡达, 李 纲 (91)

CuO/Cu_xS_y 八面体核壳结构的合成及其电化学性能 王振威, 杨晓闪, 郑亚云, 张迎九, 徐 洁 (98)

拉伸处理对碳纳米纤维/聚偏氟乙烯复合材料结晶行为和 AC 导电性能的影响
..... 孙莉莉, 吴 南, 彭 睿 (106)

非晶 AIBN 介质薄膜的制备及相关特性研究 刘峰峰, 李玉雄, 隋展鹏, 蔡 勇, 张永红, 蒋春萍 (112)

Gd₂O₃ 掺杂量对 Ce_{1-x}Gd_xO_{2-δ} 电解质导电性能的影响 刘媛媛, 李舒婷, 彭 军, 安胜利 (118)

熔体微分电纺回收 PP 无纺布纳米纤维膜制备及吸油性能
..... 谢 超, 邢 健, 丁玉梅, 王 循, 杨卫民, 李好义 (125)

2.5D 浅交直联 Cr/Al 复合材料的显微组织及弯曲和剪切性能
..... 冯景鹏, 余 欢, 徐志锋, 蔡长春, 王振军, 胡银生, 王雅娜 (132)

Ti-22Al-25Nb 合金惯性摩擦焊接头显微组织与力学性能
..... 赵 强, 祝文卉, 邵天巍, 帅焱林, 刘佳涛, 王 冉, 张 利, 梁晓波 (140)

热等静压/热处理工艺对激光选区熔化成形 GH4169 合金微观组织与拉伸性能的影响
..... 石 磊, 雷力明, 王 威, 付 鑫, 张广平 (148)

冷挤压 GH4169 合金孔结构疲劳性能与断口分析
..... 王 欣, 陈 星, 胡仁高, 胡 博, 许春玲, 汤智慧, 古远兴 (156)

Fei 氏方波对 Ni-P 合金镀层组成及其非晶化程度的调控作用
..... 郭琪琪, 费敬银, 张 嫚, 韩锡正, 赵利娜 (163)

热处理对 FeCrMnNiCo_x 合金微观组织及力学性能的影响 李和奇, 王晓民, 曾宏燕 (170)

封面照片: 花状 CdO 微球的制备及其对高氯酸铵热分解的催化性能 (见曾凡达等论文, 第 94 页图 4)

责任编辑 高 磊

CONTENTS

ELECTROMAGNETIC METAMATERIALS COLUMN

Infrared stealth metamaterials

..... LIU Xiao-ming,REN Zhi-yu,CHEN Lu-ping,LI Guo-jian,WANG Qiang,ZHOU Ji(1)

Research progress in terahertz metamaterials and their applications in imaging

..... FU Xiao-jian,SHI Lei,CUI Tie-jun(12)

Research progress in broadband absorber based on artificial electromagnetic medium

..... DU Hong-yan,ZHANG Zi-dong,TIAN Rui,ZHANG Wen-jin,ZHANG Jian,LIU Xin-yu,SUN Kai,FAN Run-hua(23)

Research progress in hyperbolic metamaterials and sensors

..... WU Hong-ya,YANG Yun,ZHANG Guang-lei,BAI Yang,ZHOU Ji(34)

Ferromagnetic/ferroelectric composites and microwave properties of its metamaterial structure

..... GUO Hong-xia,ZHANG Jia-meng,WANG Qing-min,BI Ke(43)

REVIEW

Research and application of artificial solid electrolyte interphases for lithium metal anodes protection

..... QI Xin,WANG Chen,NAN Wen-zheng,HONG Qi-hu,PENG Si-kan,YAN Shao-jiu(50)

Research progress of non-precious metal oxide coated anodes for electrocatalytic degradation of organic pollutants in water

..... TANG Chang-bin,LU Yu-xuan,WANG Fei,HUANG Ping,YU Li-hua,XUE Juan-qin(62)

Research progress in superhydrophobic anticorrosion coatings

..... WANG Xia,WANG Hui,HOU Li,JIANG Huan,ZHOU Wen-jie(73)

State-of-art of nitride microwave absorption materials

..... CUI Yi,WEI Heng-yong,YANG Jing-kai,ZHU Bin,BU Jing-long,LIANG Bo(82)

RESEARCH ARTICLE

Preparation of flower-like CdO microspheres and its catalytic performances towards thermal decomposition of ammonium perchlorate

..... ZENG Fan-da,LI Gang(91)

Synthesis and electrochemical performance of CuO/Cu_xS_y octahedral core-shell structure

..... WANG Zhen-wei,YANG Xiao-shan,ZHENG Ya-yun,ZHANG Ying-jiu,XU Jie(98)

Effect of stretching process on crystalline structures and alternating current conductivity of

CNF/PVDF composites

..... SUN Li-li,WU Nan,PENG Rui(106)

Preparation and relevant properties of amorphous ALBN dielectric films

..... LIU Feng-feng,LI Yu-xiong,SUI Zhan-peng,CAI Yong,ZHANG Yong-hong,JIANG Chun-ping(112)

Influence of Gd₂O₃ doping contents on conductivity of Ce_{1-x}Gd_xO_{2-δ} electrolyte

..... LIU Yuan-yuan,LI Shu-ting,PENG Jun,AN Sheng-li(118)

Preparation and oil absorption properties of PP non-woven nanofiber membranes by melt differential electrospinning

..... XIE Chao,XING Jian,DING Yu-mei,WANG Xun,YANG Wei-min,LI Hao-yi(125)

Microstructure, bending and shear properties of 2.5D shallow cross-linked Cr/Al composites

..... FENG Jing-peng,YU Huan,XU Zhi-feng,CAI Chang-chun,WANG Zhen-jun,HU Yin-sheng,WANG Ya-na(132)

Microstructure and mechanical properties of inertia friction welded joint of Ti-22Al-25Nb alloy

..... ZHAO Qiang,ZHU Wen-hui,SHAO Tian-wei,SHUAI Yan-lin,LIU Jia-tao,
WANG Ran,ZHANG Li,LIANG Xiao-bo(140)

Effects of hot isostatic pressing and heat treatment process on microstructure and tensile properties of selective laser melting manufactured GH4169 alloy

..... SHI Lei,LEI Li-ming,WANG Wei,FU Xin,ZHANG Guang-ping(148)

Fatigue property and fracture analysis on cold-expanded hole structure of GH4169 alloy

..... WANG Xin,CHEN Xing,HU Ren-gao,HU Bo,XU Chun-ling,TANG Zhi-hui,GU Yuan-xing(156)

Fei's square wave regulation on composition and amorphization of Ni-P alloy coating

..... GUO Qi-qi,FEI Jing-yin,ZHANG Man,HAN Xi-zheng,ZHAO Li-na(163)

Effect of heat treatment on microstructure and mechanical properties of FeCrMnNiCo_x alloy

..... LI He-qi,WANG Xiao-min,ZENG Hong-yan(170)