ISSN 1004-0609 CODEN ZYJXFK



中国有色金属学报

The Chinese Journal of Nonferrous Metals

February 2020

Volume 30 Number 2

中国有色金属学会 主办 斜 学 出 版 社 出版 中国有色金属学报

2020年2月

第30卷第2期

(总第 251 期)

目 次

材料科学与工程

制备参数对 HCCM 水平连铸 Cu-0.36Be-0.46Co 铍铜合金板材表面质量、组织和性能的影响

姜雁斌,张同同,雷 宇,刘新华,赵 兵,李永华,岳丽娟,谢建新(245)
淬火速率对含 Sc(Zr)高强韧 Al-Zn-Mg-Cu 合金微观组织和力学性能的影响
······李芳芳,徐国富,李 耀,黄继武,邓 英,尹志民(264)
β-ZrTiAlV 合金炉冷过程中的组织演变李飞涛,栾佰峰,廖仲尼,张新宇,刘日平,刘 庆(273)
2219 铝合金薄壁曲面拉伸件的变形与强化规律安立辉,苑世剑(283)
固溶条件对7136铝合金挤压型材粗晶环的影响何 颖,于科潼,吕 丹,张志豪(291)
预拉伸变形量对 7055 铝合金厚板表面残余应力的影响
基于速率温度参数计算7075铝合金蠕变本构方程
液-固体积比对消失模铸造 Al/Cu 双金属界面组织性能的影响
锆钛酸铅压电陶瓷的流延法制备及其性能
过渡金属 V、Ti 及 Y 的添加对 Mg-Al 合金储氢性能的影响黄显吞,卿培林,覃昌生,谢政专(333)
Sr _{0.8} Re _{0.2} Fe _{11.8} Co _{0.2} O ₁₉ (Re=La, Nd)的制备、表征及吸波性能
铁基含油轴承材料表面硫化改性及摩擦学性能张国涛,尹延国(348)
功率密度对 Cr12MoV 激光熔覆层组织及耐磨性的影响
······王 烨, 盛圆圆, 柳 铭, 刘 麟, 宋瑞宏, 陈 杰(355)
铸造碳化钨颗粒增强 PDC 钻头胎体的三体磨损行为胡可,谢焕文,刘辛,蔡一湘(364)
SLM 成形 Cu6AlNiSnInCe 仿金合金的工艺优化及其组织与性能

用闪锌矿制备 ZnS-ZnO 异质结及其 NO2 气敏特性

-----李爱昌, 卢艳红, 李 青, 曹 冉, 赵 娣(401)

冶金工程 • 矿业工程 • 化学化工

氟磷灰石还原的影响因素和等温动力学
加碳条件下钼精矿真空冶炼过程中主要杂质元素的行为分析王 磊,郭培民,孔令兵,赵 沛,田志凌(438)
3,5-二硝基水杨酸改性硅胶脱除稀土料液中的铝杨 洋,李金辉,高 岩,徐志峰,王瑞祥(447)
捕收剂的分子设计与绿色合成贾 云,钟 宏,王 帅,曹占芳,马 鑫,刘广义(456)
弱碱性溶液中硫砷铜矿的电化学氧化过程及表面相构成俞 娟,孟必成,黄文龙,李林波(467)

责任编辑:何学锋,王 超,李艳红,龙怀中

[期刊基本参数] CN 43-1238/TG*1991*m*A4*234*zh*P*¥80.0*1400*25*2020-02

The Chinese Journal of Nonferrous Metals

(ZHONGGUO YOUSE JINSHU XUEBAO)

Volume 30 Number 2

(Sum 251)

February 2020

CONTENTS

Materials Science and Engineering

Influences of preparing parameters on surface quality, microstructure and mechanical properties of Cu-0.36Be-0.46Co
plate produced by HCCM horizontal continuous castingJIANG Yan-bin, ZHANG Tong-tong, LEI Yu,
LIU Xin-hua, ZHAO Bing, LI Yong-hua, YUE Li-juan, XIE Jian-xin(245)
Effects of quench rate on mechanical properties and microstructures of high strength and toughness Al-Zn-Mg-Cu
alloy with Sc(Zr) additionLI Fang-fang, XU Guo-fu, LI Yao,
HUANG Ji-wu, DENG Ying, YIN Zhi-min(264)
Microstructure evolution of β -ZrTiAlV alloy during furnace cooling
LI Fei-tao, LUAN Bai-feng, LIAO Zhong-ni,
ZHANG Xin-yu, LIU Ri-ping, LIU Qing(273)
Deformation and strength distribution of stretch formed 2219 aluminum alloy thin-walled curved parts
AN Li-hui, YUAN Shi-jian(283)
Effect of solution treatment on peripheral coarse grain structure of 7136 aluminum alloy extruded profile
HE Ying, YU Ke-tong, LÜ Dan, ZHANG Zhi-hao(291)
Influence of pre-stretched ratio on surface residual stress of 7055 aluminum alloy thick plate
FAN Ning, XIONG Bai-qing, LI Zhi-hui,
YAN Hong-wei, ZHANG Yong-an, LI Xi-wu, WEN Kai (301)
Derivation of steady creep constitutive equation of 7075 aluminum alloy by rate temperature parameter
LI Ang(308)
Effects of melt-to-solid volume ratio on microstructures and mechanical properties of Al/Cu bimetal interface in
lost foam castingGUAN Feng, JIANG Wen-ming, FAN Zi-tian,
LI Guang-yu, JIANG Hai-xiao, ZHU Jun-wen(316)
Preparation and properties of lead zirconate titanate piezoelectric ceramics via tape casting
ZHANG Shao-feng, YUAN Xi, YAN Ming-yang,
WANG Xiao-yu, GAO Feng, ZHOU Ke-chao, ZHANG Dou(326)
Influences of transition elements(V, Ti, Y) on hydrogen storage property of Mg-Al alloy
HUANG Xian-tun, QING Pei-lin, QIN Chang-sheng, XIE Zheng-zhuan(333)
Preparation, characterization and absorption properties of Sr _{0.8} Re _{0.2} Fe _{11.8} Co _{0.2} O ₁₉ (Re=La, Nd)

Surface sulfurization modification and tribological properties of iron-based oil bearing materials

ZHANG Guo-tao, YIN Yan-guo(348)
Power density effect on microstructure and wear resistance of laser cladding coatings on Cr12MoV
WANG Ye, SHENG Yuan-yuan, LIU Ming, LIU Lin, SONG Rui-hong, CHEN Jie(355)
Three-body abrasive wear behavior of PDC drill bit matrix reinforced by cast tungsten carbide particles
HU Ke, XIE Huan-wen, LIU Xin, CAI Yi-xiang(364)
Process optimization, microstructure and properties of SLM forming Cu6AlNiSnInCe imitation gold alloy
CUI Bo, XIAO Zhi-yu, ZHU Quan-li, WU Yuan-biao, WEN Li-ping, CHEN Jin(372)
Preparation and NO₂ sensing properties of ZnS-ZnO heterojunctions based on sphalerite
YIN Yao-yu, LU Rui, LI Ang, HAN Cong, WEI De-zhou, SHEN Yan-bai, ZHANG Yun-hai(383)
Preparation of Pt-WC/Mnt nano-composite and its electrocatalytic activity
HE Ya-wei, WU Shi-zhao, LI Yu-ru, CHEN Li-hui, GAO Jing, LI Guo-hua(392)
Photoelectrocatalytic property and reaction mechanism of plasma photocatalyst Ag@AgBr/CNT/Ni film electrode at negative bias

Metallurgical Engineering, Mine Engineering, Chemistry and Chemical Engineering

Advances in research on microbial leaching of uranium
WEN Xu-xiang, SUN Zhan-xue, ZHOU Yi-peng, XU Ling-ling, LIU Shun-liang(411)
Coordination leaching behaviors of lead from sintering dust of steel plants
WANG Chen-yu, DENG Zhi-gan, LI Xing-bin,
WEI Chang, SUN Pu, SHI Xian-guo, LI Min-ting(421)
Influencing factors and isothermal kinetics of fluorapatite reduction
LI Yan-feng, SUN Yong-sheng, HAN Yue-xin, WANG Ding-zheng(431)
Behavior analysis of main impurity elements in vacuum smelting of molybdenum concentrate with carbon
WANG Lei, GUO Pei-min, KONG Ling-bing, ZHAO Pei, TIAN Zhi-ling(438)
Removal aluminum from RE leaching solution using 3,5-dinitrosalicylic acid modified silica gel
······································
Molecular design and green synthesis of collectors
······JIA Yun, ZHONG Hong, WANG Shuai, CAO Zhan-fang, MA Xin, LIU Guang-yi(456)
Electrochemical oxidation process and chemical composition of surface phase on enargite in weak alkaline solution
······································

(Managing Editors: HE Xue-feng, WANG Chao, LI Yan-hong, LONG Huai-zhong)