

- 甘 肃 省 优 秀 科 技 期 刊
- 《中国期刊全文数据库》全文收录期刊
- 《中国学术期刊综合评价数据库》统计源期刊
- 《万方数据——数字化期刊群》收录期刊
- 《中国核心期刊(遴选)数据库》收录期刊
- 《中文科技期刊数据库(全文版)》收录期刊

《甘肃冶金》第五届编辑委员会

主 任: 余江鸿

副 主 任: (以姓氏笔划为序)

- 石 玗 孙波涛 李尚勇
- 李 勇 张得教 张国胜
- 汪友元 拓 钊 殷国栋
- 董红健 谢叶明

委 员: (以姓氏笔划为序)

- 王贤来 王长征 石 玗
- 闫克峰 杨 斌 余江鸿
- 李尚勇 李 勇 张得教
- 张国胜 张宏昆 汪友元
- 陈体军 拓 钊 周俊烈
- 赵俊天 郭小芳 殷国栋
- 董红健 谢叶明 韩要权
- 粟渝军 窦旭东

《甘肃冶金》主管单位:

甘肃省冶金有色工业协会

《甘肃冶金》主办单位:

甘肃省金属学会

西北矿冶研究院

《甘肃冶金》理事单位:

白银有色集团股份有限公司

酒泉钢铁(集团)有限责任公司

兰州有色冶金设计研究院有限公司

甘肃土木工程科学研究院有限公司

甘肃省有色金属地质勘查局

甘肃省有色地质调查院

兰州理工大学

金川集团股份有限公司

中国铝业西北铝加工分公司

中国铝业股份有限公司兰州分公司

中国铝业股份有限公司连城分公司

甘肃省铁合金协会

(以上排名不分先后)

目 次

试验研究

新疆某高结合率硅质氧化铜矿选矿试验研究 ..... 王婷霞,罗 刚,刘 坤,苗 梁,李建龙(1)

甘肃某铅锌矿提升选矿指标试验研究 ..... 杨俊龙,常亚明,王志丰,郭艳华(4)

燃料添加方式对烧结矿冶金性能影响的研究 ..... 张 涛,高建斌,白生军(9)

绳锯残铁在莱钢 3 200 m<sup>3</sup>高炉大修中的应用 ..... 胡亚涛(13)

山西建龙 5#高炉喷渣开炉快速达产降耗的研究 ..... 李海斌,高志军,李健忠,吕国明(16)

焦炭强度降低对高炉影响的综合分析 ..... 刘国胜,王国钧,李万忠(20)

钢铁企业铁前工序降碳研究 ..... 李保良,贾 宪,辛 渊,栗文龙,张超民,耿军亮(25)

罗源闽光 1 280 m<sup>3</sup>高炉炉况失常处理分析 ..... 张晓晨(28)

氧化球团直接还原铁熔分试验研究 ..... 吴振中,陈得贵(32)

钢铁企业金属料预热技术 ..... 王瑞军(37)

高强度 87B 盘条开发生产实践 ..... 范 伟,胡 明,王立洲(41)

压力容器用埋弧焊丝钢 H10Mn2-A 盘条冶炼及轧制实践 ..... 李立仁,常 宽,杨海江,赵 琼,彭兴东(45)

高镉高铅高锌物料中镉含量的测定方法 ..... 方彦霞,孙帅楠,姚应锋,王 彬(49)

铜阳极火法精炼氧化还原脱杂生产实践 ..... 李林山,张 磊(52)

文丘里泥综合回收碲的工艺研究 ..... 侯 铎,梁友乾,王永斌,冯治兵,吴克富,李家合(56)

铜电解液中聚丙烯酰胺的检测 ..... 程 亮,李亦婧,鲁兴武,卢晓峰,杨 斌,唐清海(60)

焦炭对铅锌密闭鼓风炉生产的影响分析 ..... 苗彦臣,陶乃兴,刘国锋,李 珺,赵富强(64)

铝合金连续铸轧炉内精炼效果浅析 ..... 程久元(68)

抗氧化涂层阳极技术在铝电解生产的应用 ..... 牛伟伟,徐奎年,耿 晖,陈新群(72)

天然气焙烧集成技术在 500 kA 全石墨化阴极电解槽的实践 ..... 胡跃文,韩启超(75)

基于改进 40Mn2 金相组织形态提高锯切性能的研究 ..... 吕纪永,刘荣泉,刘 俊(79)

铝合金中高锡含量的测定方法研究 ..... 张彦翠,王亚平,杨 扬,王源端,孙帅楠,马健飞(82)

低碳钢热轧卷板边部翘皮缺陷原因分析 ..... 万永健,巩彦坤(85)

430 铁素体不锈钢冷轧带钢表面黑带缺陷分析 ..... 住玉乾,莫志斌,王雪林,陈兴润,赵彦灵,胡桓彰(88)

中高碳钢在 UCM 连轧机组稳定轧制攻关 ..... 郭渊强,赵小龙,狄彦军,蔺晓亮(93)

SUS430 铁素体不锈钢热轧板形控制优化 ..... 赵彦灵,王 珂,万占学(96)

纯镍和镍合金线材在同一精轧机组内的轧制模拟研究 ..... 程知松,高 源,徐正斌(99)

甘肃省宕昌县鱼鳞沟铜多金属矿地质特征及成矿条件分析 ..... 王 超(104)

四川省会理县汪家湾铜矿找矿标志及成矿预测 ..... 胡 杰,杨博天,史少飞,李林富(109)

新疆若羌县阿密斯腾塔格一带水系沉积物测量地球化学特征及钨锡多金属成矿远景预测 ..... 陈 鹏(113)

甘肃省玉门市金湾子金矿地质特征及找矿前景浅析 ..... 张亚超(116)

地球化学测量在曹家沟金矿区地质工作中的指示作用 ..... 张忠伟(120)

应用技术

某工业硅生产企业矿热炉废气脱硫脱硝治理措施浅析 ..... 王丽苑,李文臣,郭小芳(125)

从废催化剂中回收铂族金属处理工艺及污染管控要求浅析 ..... 朱 红,郭小芳,张 丹,张国军,黄天龙(129)

白银某矿区土壤中铬(VI)的测定 ..... 李永莉,齐白羽,侯 雪,王 卓,高正娇(132)

## Contents

**Test & Research**

- Experimental Study on Beneficiation of a High Binding Siliceous Copper Oxide in Xinjiang  
..... WANG Tingxia, LUO Gang, LIU Kun, MIAO Liang, LI Jianlong (1)
- Experimental Study on Beneficiation Index of a Lead-Zinc Mine in Gansu Province  
..... YANG Junlong, CHANG Yaming, WANG Zhifeng, GUO Yanhua (4)
- Study on the Influence of Fuel Addition Method on Metallurgical Properties of Sinter ... ZHANG Tao, GAO Jianbin, BAI Shengjun (9)
- Application of Rope Saw Scrap Iron in Overhaul of 3 200 m<sup>3</sup> Blast Furnace of Laisteel ..... HU Yatao (13)
- Study on Rapid Production and Consumption Reduction of Shanxi Jianlong 5# Blast Furnace by Spraying  
..... LI Haibin, GAO Zhijun, LI Jianzhong, LYU Guoming (16)
- Comprehensive Analysis of Influence of Coke Strength Reduction on Blast Furnace  
..... LIU Guosheng, WANG Guojun, LI Wanzhong (20)
- Research on Carbon Reduction of Pre-Iron Process in Iron and Steel Enterprises  
..... LI Baoliang, JIA Xian, XIN Yuan, LI Wenlong, ZHANG Chaomin, GENG Junliang (25)
- Analysis of the Processing of Luoyuan Minguang Blast Furnace 1 280 m<sup>3</sup> Furnace Condition Failure ..... ZHANG Xiaochen (28)
- Experimental Study on Melting of Direct Reduced Iron in Oxidized Pellets ..... WU Zhenzhong, CHEN Degui (32)
- Technology of Metal Preheating for Iron & Steel Enterprise ..... WANG Ruijun (37)
- Development and Production Practice of High Strength 87B Wire Rod ..... FAN Wei, HU Ming, WANG Lizhou (41)
- Smelting and Rolling Practice of Submerged Arc Welding Wire Steel H10Mn2-A Wire Rod for Pressure Vessels  
..... LI Liren, CHANG Kuan, YANG Haijiang, ZHAO Qiong, PENG Xingdong (45)
- Determination of Zinc Content in High Cadmium, High Lead and High Zinc Materials  
..... FANG Yanxia, SUN Shuanan, YAO Yingfeng, WANG Bin (49)
- Redox Deimpurity Production Practice of Copper Anode Fire Refining ..... LI Linshan, ZHANG Lei (52)
- Research on Technology of Comprehensive Recovery of Tellurium from Venturi Mud  
..... HOU Duo, LIANG Youqian, WANG Yongbin, FENG Zhibing, WU Kefu, LI Jiahe (56)
- Detection of Polyacrylamide in Copper Electrolyte  
..... CHENG Liang, LI Yijing, LU Xingwu, LU Xiaofen, YANG Bin, TANG Qinghai (60)
- Analysis of the Influence of Coke on the Production of Lead-Zinc Closed Blast Furnace  
..... MIAO Yanchen, TAO Naixing, LIU Guofeng, LI Jun, ZHAO Fuqiang (64)
- Analysis of the Refining Effect in Aluminum Alloy Continuous Casting and Rolling Furnace ..... CHENG Jiuyuan (68)
- Application of Anodic Technology of Anti-Oxidation Coating in Aluminum Electrolysis Production  
..... NIU Weiwei, XU Kuinian, GENG Hui, CHEN Xinqun (72)
- Practice of Integrated Gas Roasting Technology in 500 kA Fully Graphitized Cathode Electrolytic Cell  
..... HU Yuewen, HAN Qichao (75)
- Research on Improving Sawing Performance Based on Improving 40Mn2 Metallographic Structure Morphology  
..... LYU Jiyong, LIU Rongquan, LIU Jun (79)
- Determination Method of High Content Tin on Lead Alloy  
..... ZHANG Yancui, WANG Yaping, YANG Yang, WANG Yuanrui, SUN Shuainan, MA Jianfei (82)
- Analysis on the Causes of Edge Warping Defect of Low Carbon Steel Hot Rolled Coil ..... WAN Yongjian, GONG Yankun (85)
- Analysis of Surface Black Band Defects of 430 Ferritic Stainless Steel Cold Rolled Strip  
..... ZHU Yuqian, MO Zhibin, WANG Xuelin, CHEN Xingrun, ZHAO Yanling, HU Huanzhang (88)
- Research on Stable Rolling of Medium and High Carbon Steel in UCM Tandem Mill  
..... GUO Yuanqiang, ZHAO Xiaolong, DI Yanjun, LIN Xiaoliang (93)
- Shape Control Optimization of SUS430 Ferritic Stainless Steel Hot Rolling ..... ZHAO Yanling, WANG Ke, WAN Zhanxue (96)
- Simulation Study of Pure Nickel and Nickel Alloy Wire Rolling in the Same Finishing Mill Group  
..... CHENG Zhisong, GAO Yuan, XU Zhengbing (99)
- Geological Characteristics and Metallogenic Conditions of the Yulinggou Copper Polymetallic Deposit in Tanchang County of Gansu Province ..... WANG Chao (104)
- Prospecting Signs and Metallogenic Prediction of Wangjiawan Copper Deposit in Huili County, Sichuan Province  
..... HU Jie, YANG Botian, SHI Shaofei, LI Linfu (109)
- Geochemical Characteristics of Stream Sediment Survey and Potential Prediction of Tungsten-Tin Polymetallic Mineralization in Amisten-tagh Area, Ruoqiang County, Xinjiang ..... CHEN Peng (113)
- Geological Characteristics and Prospecting Prospect of Gold Deposit in Jinwanzi, Yumen City, Gansu Province ..... ZHANG Yachao (116)
- Indicative Role of Geochemical Survey in Geological Work of Caojiagou Gold Mining Area ..... ZHANG Zhongwei (120)

**Application & Technology**

- Analysis on the Treatment Measures of Waste Gas Desulfurization and Denitrification from Ore Furnace of an Industrial Silicon Production Enterprise ..... WANG Liyuan, LI Wenchen, GUO Xiaofang (125)
- Analysis of Treatment Technology and Pollution Control Requirements for Recovering Platinum Group Metals from Waste Catalysts  
..... ZHU Hong, GUO Xiaofang, ZHANG Dan, ZHANG Guojun, HUANG Tianlong (129)
- Determination of Hexavalent Chromium in Soil of Baiyin Mining Area  
..... LI Yongli, QI Baiyu, HOU Xue, WANG Zhuo, GAO Zhengjiao (132)