

中文核心期刊 中国科技核心期刊 中国科学引文数据库来源期刊 中文科技期刊数据库收录期刊 中国学术期刊文摘收录期刊
SCOPUS数据库收录期刊 美国《金属文摘》收录期刊 美国《剑桥科学文摘》收录期刊 美国《化学文摘》收录期刊
日本科学技术文献速报收录期刊



ISSN 0449-749X
CN 11-2118/TF

12 (卷终)
2020 Vol.55

钢

铁

IRON & STEEL

C S M

中 国 金 属 学 会
钢 铁 研 究 总 院 主 办
北京钢研柏苑出版有限责任公司

目 次

综合论述	
钢渣中磷分离及回收的研究现状和发展趋势·····	杜传明, 于耀辉, 袁 磊, 于景坤 1
原料与炼铁	
焦炉煤气与 O ₂ 裂解时竖炉产量的热力学计算 ·····	周宇露, 姜 鑫, 王小艾, 郑海燕, 罗果萍, 沈峰满 10
CaCO ₃ 分解对熔剂性球团强度的影响 ···	刘文强, 韩闯闯, 李 杰, 杨爱民, 李 飞, 李大亮 18
炼钢	
基于 FA-ELM 的转炉终点磷含量预测模型 ·····	高 放, 包燕平, 王 敏, 刘 宇, 黄永生, 孙光涛 24
差流量吹氩模式对 150 t 钢包混匀与顶渣行为的影响 ·····	胡 群, 李小松, 张家泉, 连艳新, 唐海燕 31
镁处理对 40Cr 铝镇静钢中夹杂物的影响 ·····	焦魁明 39
钢中钛含量对连铸结晶器内渣金反应的影响 ·····	王杏娟, 靳贺斌, 朱立光, 王宝华, 张明博, 王 博 46
压力加工	
倒角对变接触支撑辊辊形性能的影响 ·····	刘东冶, 邵 健, 何安瑞, 刘鹏宇, 李文俊 56
冷连轧以辊耗控制为目标的润滑制度优化技术·····	程志彦, 崔熙颖, 刘云峰, 白振华 61
钢铁材料	
铬和铝元素对低碳贝氏体钢组织和性能影响 ·····	姚籽杉, 胡海江, 田俊羽, 周明星, 徐 光 66
原始组织对 690 MPa 级海工钢亚温淬火后强韧性的影响 ·····	王 通, 张 朋, 王九清, 庞辉勇, 龙 杰, 赵喜伟 72
高温回火对 USS122G 超高强度不锈钢显微组织的影响 ·····	白若昕, 刘振宝, 曹建春, 王晓辉 81
热轧逆相变退火中锰钢的疲劳性能·····	周峰峦, 王存宇, 曹文全, 董 瀚 87
不同上冷床温度对螺纹钢组织性能的影响 ·····	蔡 伟, 金 梁, 毛俊春, 刘昌武, 姚赛峰, 谭 忠 92
环保与能源	
钢铁制造流程“界面”技术与界面能量损失分析 ·····	周继程, 上官方钦, 丁 毅, 邴秀萍, 韩伟刚, 郭玉华 99
技术交流	
考虑铸轧协调的炼钢-连铸-热轧一体化生产计划 ·····	郑 忠, 王永周, 卢 义, 高小强 107
信息	
·····	(30)
征订启示	
·····	(114)

CONTENTS

Technical Reviews

Research status and development trend of phosphorus separation and recovery from steelmaking slag
..... DU Chuan-ming, YU Yao-hui, YUAN Lei, YU Jing-kun 1

Raw Material and Ironmaking

Thermodynamic calculation on yield of shaft furnace as COG pyrolysed with O₂
..... ZHOU Yu-lu, JIANG Xin, WANG Xiao-ai, ZHENG Hai-yan, LUO Guo-ping, SHEN Feng-man 10

Effect of CaCO₃ decomposition on fluxed pellets strength
..... LIU Wen-qiang, HAN Chuang-chuang, LI Jie, YANG Ai-min, LI Fei, LI Da-liang 18

Steelmaking

Prediction model of end-point phosphorus content of converter based on FA-ELM
..... GAO Fang, BAO Yan-ping, WANG Min, LIU Yu, HUANG Yong-sheng, SUN Guang-tao 24

Effect of differential flowrate argon blowing mode on mixing and top slag behavior for a 150 t ladle
..... HU Qun, LI Xiao-song, ZHANG Jia-quan, LIAN Yan-xin, TANG Hai-yan 31

Effect of magnesium treatment on inclusions in 40Cr Al-killed steel JIAO Kui-ming 39

Effect of titanium content in steel on slag-metal reaction in continuous casting mold
..... WANG Xing-juan, JIN He-bin, ZHU Li-guang, WANG Bao-hua, ZHANG Ming-bo, WANG Bo 46

Metal Forming

Influence of chamfering on roll shape performance of variable contact-length support roll
..... LIU Dong-ye, SHAO Jian, HE An-rui, LIU Peng-yu, LI Wen-jun 56

Optimization technology of technological lubrication with roll consumption control in cold rolling process
..... CHENG Zhi-yan, CUI Xi-ying, LIU Yun-feng, BAI Zhen-hua 61

Materials

Effect of Cr and Al on microstructure and properties of low carbon bainitic steels
..... YAO Zi-shan, HU Hai-jiang, TIAN Jun-yu, ZHOU Ming-xing, XU Guang 66

Effect of original structure on strength and toughness of 690 MPa grade marine engineering steel after intercritical quenching
..... WANG Tong, ZHANG Peng, WANG Jiu-qing, PANG Hui-yong, LONG Jie, ZHAO Xi-wei 72

Effect of high temperature tempering on microstructure of USS122G ultra-high strength stainless steel
..... BAI Ruo-xin, LIU Zhen-bao, CAO Jian-chun, WANG Xiao-hui 81

Fatigue properties of hot-rolled medium manganese steel treated by ART-annealing
..... ZHOU Feng-luan, WANG Cun-yu, CAO Wen-quan, DONG Han 87

Impact of different temperatures of deformed steel bar on cooling bed on performance of microstructure
..... CAI Wei, JIN Liang, MAO Jun-chun, LIU Chang-wu, YAO Sai-feng, TAN Zhong 92

Environmental Protection and Energy

Discuss on interface technology and energy loss of main Interface in steel manufacturing process
..... ZHOU Ji-cheng, SHANGGUAN Fang-qin, DING Yi, LI Xiu-ping, HAN Wei-gang, GUO Yu-hua 99

Technology Exchange

Integrated production planning of steelmaking-continuous casting-hot rolling considering coordination between casting and rolling ZHENG Zhong, WANG Yong-zhou, LU Yi, GAO Xiao-qiang 107

Information

..... (30)

Subscription Announcement

..... (114)