

目 次

综合论述

高炉大型化后对焦炭性质及在炉内劣化的思考吴 铿, 折 媛, 刘起航, 湛文龙 1

原料与炼铁

铁矿含碳球团高温抗压强度研究及机理分析

.....杨乐彪, 李家新, 杨佳龙, 魏汝飞, 孟庆民, 龙红明 13

w(TiO₂) 对烧结矿矿相结构及软熔滴落性能的影响

.....王耀祖, 张建良, 刘征建, 张亚鹏, 刘东辉, 杜诚波 20

炼钢

转炉炼钢渣磷元素的富集及影响因素吕延春, 王新华, 秦登平, 王海宝 29

300 t 脱磷炉渣-钢界面搅拌与传质效果模拟

.....黄 博, 孙彦辉, 白雪峰, 赵长亮, 罗 磊, 田志红 38

钢包底吹氩中非金属夹杂物分布的水力学模拟巨建涛, 韦建庆, 刘文果 45

锰质量分数对 Fe-Mn-C 钢热物性参数的影响王毓男 51

压力加工

基于非均匀温度场的 GCr15 轴承钢均匀化轧制

.....邢鹏达, 王玉辉, 王志蒙, 曹文全, 王天生, 彭 艳 59

常规热连轧线 Ti-IF 钢铁素体轧制工艺研究与应用

.....王建功, 赵 虎, 夏银锋, 周 旬, 康永林, 邱晨阳 65

钢铁材料

超级奥氏体不锈钢的高温变形行为曾 莉, 张 威, 王 琦, 朱丽丽 72

加热工艺对含磷高强钢氧化行为的影响蒋光锐, 王海全, 刘李斌 78

大型客机用 300M 钢疲劳破坏行为章伟钢, 韩 顺, 厉 勇, 黄顺喆, 蒙庆, 周 芸 83

无镍高氮不锈钢弯曲疲劳裂纹萌生与扩展行为

.....张慧芳, 肖振兴, 周 宇, 钱丽华, 王 薇, 吕知清 89

高强度建筑钢筋质量分析及标准修改建议杨才福, 陈雪慧, 王瑞珍 94

装备技术

连铸机拉矫辊辊面激光重熔纳米 ZrO₂ 基涂层性能李 军, 孙登月, 张 锋, 许石民 104

征稿及征订启事

..... (28)(37)(111)(112)

CONTENTS

Technical Reviews

Consideration on properties of coke and coke deterioration after large-scale blast furnace
 WU Keng, SHE Yuan, LIU Qi-hang, ZHAN Wen-long 1

Raw Material and Ironmaking

Thermal compressive strength and its mechanism analysis of carbon-bearing pellet
 YANG Le-biao, LI Jia-xin, YANG Jia-long, WEI Ru-fei, MENG Qing-min, LONG Hong-ming 13

Effects of $w(\text{TiO}_2)$ on mineral structure and softening-melting property of sinter
 WANG Yao-zu, ZHANG Jian-liang, LIU Zheng-jian, ZHANG Ya-peng, LIU Dong-hui, DU Cheng-bo 20

Steelmaking

Enrichment and influencing factors of phosphorus in slag of converter steelmaking
 LÜ Yan-chun, WANG Xin-hua, QIN Deng-ping, WANG Hai-bao 29

Simulate on agitating and mass transfer effect of 300 t dephosphorization slag-steel interface
 HUANG Bo, SUN Yan-hui, BAI Xue-feng, ZHAO Chang-liang, LUO Lei, TIAN Zhi-hong 38

Hydraulic model experiment of non-metallic inclusion distribution in a bottom-blown argon ladle furnace
 JU Jian-tao, WEI Jian-qing, LIU Wen-guo 45

Effects of $w(\text{Mn})$ on thermal properties of Fe-Mn-C steelsWANG Yu-nan 51

Metal Forming

Homogenizing rolling technology of GCr15 bearing steel based on non-uniform temperature field
 XING Peng-da, WANG Yu-hui, WANG Zhi-meng, CAO Wen-quan, WANG Tian-sheng, PENG Yan 59

Development and application of ferrite rolling to Ti-IF steel in hot continuous rolling line
 WANG Jian-gong, ZHAO Hu, XIA Yin-feng, ZHOU Xun, KANG Yong-lin, QIU Chen-yang 65

Materials

Hot deformation behavior of super austenitic stainless steelZENG Li, ZHANG Wei, WANG Qi, ZHU Li-li 72

Heating process on oxidation behavior of P-bearing high strength steel ... JIANG Guang-ru, WANG Hai-quan, LIU Li-bin 78

Behavior of fatigue fracture of 300M steel for large passenger aircraft
 ZHANG Wei-gang, HAN Shun, LI Yong, HUANG Shun-zhe, MENG Qing, ZHOU Yun 83

Bending fatigue crack initiation and propagation behaviors of a nickel free high nitrogen stainless steel
 ZHANG Hui-fang, XIAO Zhen-xing, ZHOU Yu, QIAN Li-hua, WANG Wei, LÜ Zhi-qing 89

Quality assessment and suggestion of standard revision for high strength rebars in China
 YANG Cai-fu, CHEN Xue-hui, WANG Rui-zhen 94

Equipment Technology

Properties of nano ZrO_2 coating on roller surface of continuous casting machine
 LI Jun, SUN Deng-yue, ZHANG Feng, XU Shi-min 104

Contribution Wanted and Subscription Announcement

..... (28)(37)(111)(112)