

耐火材料

双月刊

REFRACTORIES



R11-R22



R09



R05



R03



R02

建湖申江机械有限公司

地址：江苏省建湖经济开发区永兴路188号
电话：0515-8616 6698 传真：0515-8616 6686
手机：13851317950 邮箱：13851317950@163.com
网址：www.jhsjjx.com



主管、主办

中钢集团洛阳耐火材料研究院有限公司

万方数据

2020 · 5 | 10月出版

第 54 卷 (总第 365 期)

目 次

研究开发

- 369 含LiAlO₂-Y₂O₃复合助烧剂的氮化硅陶瓷低温致密化研究 郭 昂, 王战民, 赵世贤, 李凌锋
374 Y₂O₃添加量对SiC-MgAl₂O₄复合材料性能的影响 夏 森, 孙红刚, 李红霞, 司瑶晨, 杜一昊, 尚心莲
380 网状孔壁煤矸石多孔陶瓷的制备及其对亚甲基蓝吸附研究 刘可乐, 刘静静, 李亚杰, 任 博, 刘相枫, 常仕博, 段 婷, 王修慧, 杨金龙
385 不同氮化条件对聚氨酯泡沫浸渍氮化制备Si₃N₄纤维材料的影响 杜鹏辉, 王 刚, 韩建燊, 梁鹏鹏, 陈政龙, 张 琪, 李红霞
390 SiO₂微粉对水泥结合铝镁质喷补料性能的影响 张青霞, 聂建华, 李洪波, 梁永和, 李维锋, 蔡曼菲, 李明昊
395 碳化硼对刚玉-碳化硅复合材料表面氧化膜的影响 幸非凡, 刘 璐, 杨 春, 张 杨, 张润杰, 魏军从, 涂军波
399 活性氧化铝微粉种类对钢包用 ρ -Al₂O₃结合Al₂O₃-MgO浇注料性能的影响 李仕祺, 李远兵, 魏 昊, 徐娜娜, 李淑静
404 不同碳源对Al₂O₃-Al-C材料性能的影响 韩晓源, 石 凯, 夏 煦, 杨忠鑫, 马世行
409 添加Fe基催化剂对酚醛树脂结合低碳MgO-C材料性能的影响 陈海山, 卢咏明, 张小红, 陈平安, 王百帅, 李享成, 朱伯铨
413 钢包用铝镁尖晶石质浇注料性能的研究 刘朋狄, 段 锋, 丁东海, 任学华, 祝军辉
420 锆英石分解的显微结构剖析 高振昕, 田晓利, 张秀丽, 李君霞

生产应用

- 423 热历史对红柱石基耐火材料性能和结构的影响 石 千, 范沫旭, 刘鹏程, 周会俊, 李柳生, 廖桂华
427 造粒颗粒粒度级配对ZrO₂陶瓷轴承坯体孔隙率的影响 余冬玲, 张小辉, 吴南星, 廖达海
430 溶剂和催化剂对低碳Al₂O₃-C材料性能的影响 闫广周, 王鑫惠, 马渭奎, 杨凤玲, 刘国齐, 于建宾, 钱 凡
434 铝酸钙水泥含量对浇注料800 °C煅烧后强度的影响 张佩雄, 刘明杨, 王晓雨, 付云鹤, 高 耸, 穆元冬, 叶国田
438 基于ANSYS程序的钢包用不同材质滑板温度场研究 姜向盈, 田 琳, 张小宁, 吴殿峰
441 添加La₂O₃对低品位菱镁矿制备烧结镁砂的影响 崔 妍, 刘 新, 曲殿利
444 提高100 t精炼钢包包龄实践 张 梁

综合评述

- 448 董青石多孔陶瓷的制备及研究进展 张 会, 薛群虎, 张 红
452 高炉炮泥的研究进展 唐艳东, 马北越, 高 陟
457 氮化硅粉体制备方法研究进展 刘 萍, 徐恩霞, 谢宏旭, 曹雨后

综合信息

《第十七届全国耐火材料青年学术报告会论文集》(U盘)书讯(379); 《耐火材料》杂志2021年征订已开始, 欢迎订阅! (384)

Contents

- 369** Low temperature densification of silicon nitride ceramics with $\text{LiAlO}_2\text{-Y}_2\text{O}_3$ as composite sintering additive
Guo Ang, Wang Zhanmin, Zhao Shixian, Li Lingfeng
- 374** Effect of Y_2O_3 addition on properties of $\text{SiC}-\text{MgAl}_2\text{O}_4$ composites
Xia Miao, Sun Honggang, Li Hongxia, Si Yaochen, Du Yihao, Shang Xinlian
- 380** Preparation of coal gangue porous ceramics with reticular architecture and their adsorption to methylene blue
Liu Kele, Liu Jingjing, Li Yajie, Ren Bo, Liu Xiangfeng, Chang Shibo, Duan Ting, Wang Xuhui, Yang Jinlong
- 385** Effect of nitriding condition on polyurethane foam impregnation and nitriding to fabricate silicon nitride fibers
Du Penghui, Wang Gang, Han Jianshen, Liang Pengpeng, Chen Zhenglong, Zhang Qi, Li Hongxia
- 390** Effect of silica micropowder on cement-bonded $\text{Al}_2\text{O}_3\text{-MgO}$ gunning mix
Zhang Qingxia, Nie Jianhua, Li Hongbo, Liang Yonghe, Li Weifeng, Cai Manfei, Li Minghao
- 395** Effect of boron carbide on surface oxide film of corundum-silicon carbide composites
Xing feifan, Liu Lu, Yang Chun, Zhang Yang, Zhang Runjie, Wei Juncong, Tu Junbo
- 399** Effect of types of activated alumina micropowder on properties of $\rho\text{-Al}_2\text{O}_3$ bonded $\text{Al}_2\text{O}_3\text{-MgO}$ castables for ladles
Li Shiqi, Li Yuanbing, Wei Hao, Xu Nana, Li Shujing
- 404** Effect of carbon resources on properties of $\text{Al}_2\text{O}_3\text{-Al-C}$ materials
Han Xiaoyuan, Shi Kai, Xia Yi, Yang Zhongxin, Ma Shihang
- 409** Effect of Fe-based catalysts on properties of phenolic resin bonded low carbon MgO-C refractories
Chen Haishan, Lu Yongming, Zhang Xiaohong, Chen Ping'an, Wang Baishuai, Li Xiangcheng, Zhu Boquan
- 413** Properties of magnesium aluminat spinel castables for ladles
Liu Pengdi, Duan Feng, Ding Donghai, Ren Xuehua, Zhu Junhui
- 420** Microstructure analysis on zircon decomposition
Gao Zhenxin, Tian Xiaoli, Zhang Xiuli, Li Junxia
- 423** Effect of thermal history on properties and structure of andalusite based refractories
Shi Gan, Fan Muxu, Liu Pengcheng, Zhou Huijun, Li Liusheng, Liao Guihua
- 427** Effect of granulation particle size distribution on porosity of ZrO_2 ceramic bearing green bodies
Yu Dongling, Zhang Xiaohui, Wu Nanxing, Liao Dahai
- 430** Influence of solvents and catalyzerons on properties of low carbon $\text{Al}_2\text{O}_3\text{-C}$ materials
Yan Guangzhou, Wang Xinhui, Ma Weikui, Yang Fengling, Liu Guoqi, Yu Jianbin, Qian Fan
- 434** Effect of CAC contents on strength of castables fired at 800 °C
Zhang Peixiong, Liu Mingyang, Wang Xiaoyu, Fu Yunhe, Gao Song, Mu Yuandong, Ye Guotian
- 438** Research on temperature field of sliding plates of different materials for ladles based on ANSYS
Jiang Xiangying, Tian Lin, Zhang Xiaoning, Wu Dianfeng
- 441** Effect of adding La_2O_3 on preparation of sintered magnesia with low grade magnesite
Cui Yan, Liu Xin, Qu Dianli
- 444** Practice to improve service life of a 100 t refining ladle
Zhang Liang
- 448** Preparation and research progress of cordierite porous ceramics
Zhang Hui, Xue Qunhu, Zhang Hong
- 452** Latest research progress of taphole clay for blast furnaces
Tang Yandong, Ma Beiyue, Gao Zhi
- 457** Research progress on preparation methods of silicon nitride powder
Liu Ping, Xu Enxia, Xie Hongxu, Cao Yuhou

Sponsor : Sinosteel Luoyang Institute of Refractories Research Co., Ltd.(LIRR)
Editor and Publisher : The Editorial Board of NAIHUO CAILIAO
Editor-in-chief : PENG Xigao
Add : 43 Xiyuan Road, Luoyang, Henan 471039, China
Tel : +86-379-64205959 Fax : +86-379-64205970
E-mail : nhcl@nhcl.com.cn
Web Site : <http://www.nhcl.com.cn>, www.china-refractories.cn
Subscription rate :
Print : USD 150 (overseas, including air mail postage)
Digital : USD 100 (overseas)

Sponsored by Sinosteel Luoyang Institute of Refractories Research Co.,Ltd. (LIRR), established in 1966, **Naihuo Cailiao(Refractories)** is the only technical journal in Chinese in China's refractories industry that reports current situations of the R & D, production and application of refractories in China together with the development status and trend of refractories science and technology abroad. **Naihuo Cailiao** is published bimonthly and distributed both at home and abroad with the annual distribution circulation of about 20 thousand copies.

Naihuo Cailiao also affords space for advertisement which is beneficial to the manufacturers and users home and abroad to establish connection, to promote production and sales, and especially to help foreign companies share China's market.