

目次

微细粒矿物分离过程强化

- 微细粒矿物浮选综述: 增大颗粒表观尺寸与减小气泡直径... 任浏祎, 肖丹丹, 覃文庆(1)
微细粒锡石涡流强化浮选及 CFD 数值模拟研究... 葛昱谦, 李晓恒, 孙志新, 韩鑫定, 张明青, 闫小康(16)
淀粉接枝丙烯酰胺与聚丙烯酰胺对高岭土动态絮凝差异的研究... 高博, 刘新辉, 姚雷, 袁雪, 谢永鑫, 卜祥宁, 沙杰(24)
阴阳离子组合捕收剂对微细粒赤铁矿与石英浮选分离的研究... 贾露繁, 罗溪梅, 王云帆, 宋振国, 周永锋, 蒋旺强, 洪欣(33)
微细鳞片石墨纳米气泡浮选与传统浮选的对比研究... 李明娇, 南楠, 马芳源, 李湘微, 王睿, 张迪, 唐崇亮(40)
纳米气泡的制备方法及其强化微细颗粒矿物浮选机理的研究进展... 王睿, 南楠, 马芳源, 李明娇, 李湘微, 张迪, 唐崇亮(46)

矿物加工工程

- 气溶胶化丁基黄药强化黄铁矿浮选回收机理研究... 张帅, 王宇斌, 雷大士, 吴忠意, 张钰(53)
羧甲基纤维素对磷灰石与白云石浮选分离的影响及机理研究... 范宛惠, 姬志杰, 杨帆, 周峰, 张汉泉(61)
改性黑药类捕收剂强化浮选玉龙铅锌矿中伴生银的无碱工艺研究... 江锋, 何帅, 唐鸿鹤, 吴永安, 韩英杰, 许世明(67)
卤代改性月桂酸捕收剂 WN-01 对氟碳铈矿的捕收性能研究... 池汝安, 王楠, 郭文达, 张臻悦, 刘德峰, 李新宜(74)
某高磷铁矿悬浮焙烧—磁选—浸出提铁降磷实验研究... 王绍兴, 宁国栋, 刘应志, 李艳军(82)
某高钙钨尾矿反—正浮选工艺回收铷的研究... 冯章标, 阳华玲, 王长福(89)

矿物材料

- 天然沸石对模拟尾矿渗滤液中重金属离子的静、动态吸附研究... 杨兰, 李兆明, 梅乐夫, 吕国诚, 廖立兵(95)

综合评述

- 乳化捕收剂强化煤泥浮选研究进展... 安茂燕, 廖寅飞, 解恒参, 赵美霞(105)
我国铌矿资源概况及选矿技术进展... 尹兆波, 高利坤, 饶兵(115)
离散元法在矿石破碎中的应用研究进展... 谢存黎, 田小松, 王飞旺, 梁泽跃, 杨斌, 戴惠新(126)

**CONTENTS IN BRIEF**

**Strengthening Separation of Fine Minerals**

- Review on fine mineral flotation: increasing apparent particle size and decreasing bubble diameter ..... REN Liuyi, XIAO Dandan, QIN Wenqing (1)
- Study on the vortex-driven flotation of fine cassiterite and cfd numerical simulation  
..... GE Yuqian, LI Xiaoheng, SUN Zhixin, HAN Xinding, ZHANG Mingqing, YAN Xiaokang (16)
- Differences of flocculating characteristics of difficult-to-settle coal slime water between polyacrylamide-grafted starch copolymer and polyacrylamide  
..... GAO Bo, LIU Xinhui, YAO Lei, YUAN Xue, XIE Yongxin, BU Xiangning, SHA Jie (24)
- Research on the flotation separation of fine-grained hematite and quartz by combined cation-anion collectors  
..... JIA Lufan, LUO Ximei, WANG Yunfan, SONG Zhenguo, ZHOU Yongfeng, JIANG Wangqiang, HONG Xin (33)
- Comparative study of nanobubble flotation and traditional flotation for micro-fine flake graphite  
..... LI Mingjiao, NAN Nan, MA Fangyuan, LI Xiangwei, WANG Rui, ZHANG Di, TANG Chongliang (40)
- Research status on the preparation methods of nanobubbles and the mechanism of enhancing the flotation of micro-fine minerals  
..... WANG Rui, NAN Nan, MA Fangyuan, LI Mingjiao, LI Xiangwei, ZHANG Di, TANG Chongliang (46)

**Mineral Processing**

- Flotation mechanism of pyrite enhanced by aerosolized butyl xanthate  
..... ZHANG Shuai, WANG Yubin, LEI Dashi, WU Zhongyi, ZHANG Yu (53)
- Effect and mechanism of carboxymethyl cellulose on flotation separation of apatite against dolomite  
..... FAN Wanhui, JI Zhijie, YANG Fan, ZHOU Feng, ZHANG Hanquan (61)
- Alkali-free process for enhancing the flotation of associated silver in yulong lead-zinc ore with modified dithiophosphate-type collector  
..... JIANG Feng, HE Shuai, TANG Honghu, WU Yongan, HAN Yingjie, XU Shiming (67)
- Flotation performance of bastnaesite with a halogenated lauric acid collector WN-01  
..... CHI Ru'an, WANG Nan, GUO Wenda, ZHANG Zhenyue, LIU Defeng, LI Xinyi (74)
- Dephosphorization of a high-phosphorus iron ore by magnetic roasting-leaching process ..... WANG Shaoxing, NING Guodong, LIU Yingzhi, LI Yanjun (82)
- Recovery of rubidium from a tungsten tailings containing high calcite by reverse-positive flotation process  
..... FENG Zhangbiao, YANG Hualing, WANG Changfu (89)

**Mineral Materials**

- Study on the static and dynamic adsorption of heavy metal ions in simulated tailings leachate by natural zeolite  
..... YANG Lan, LI Zhaoming, MEI Lefu, LV Guocheng, LIAO Libing (95)

**Reviews**

- Research progress of the emulsified collector in enhancing coal slime flotation ..... AN Maoyan, LIAO Yinfei, XIE Hengshen, ZHAO Meixia (105)
- Overview of niobium resources and progress in mineral processing technology in China ..... YIN Zhaobo, GAO Likun, RAO Bing (115)
- Application research status of discrete element method in ore crushing  
..... XIE Cunli, TIAN Xiaosong, WANG Feiwang, LIANG Zeyue, YANG Bin, DAI Huixin (126)