

# 有色金属

选矿  
部分

3  
2019年

NONFERROUS METALS  
MINERAL PROCESSING SECTION

主管单位 中国有色金属工业协会  
主办单位 北京矿冶科技集团有限公司



北矿机电科技有限责任公司  
680m<sup>3</sup>浮选机

矿冶科技 引领未来



单位：北矿机电科技有限责任公司  
电话：010-63299258/7/9  
邮箱：bjky@vip.sina.com  
网址：www.bgrimm-mat.com



ISSN 1671-9492

05>



9 771671 949028

万方数据

## 目 次

## \* 工艺矿物学 \*

- 某难选铜锌矿的工艺矿物学研究 ..... 江皇义, 卢炼十, 宋振国, 陈忠玉, 金建文(1)  
赣北某钨钼矿钨矿石工艺矿物学研究 ..... 叶少贞, 胡承凡, 高任, 汪国华, 卜涛(5)

## \* 选矿工艺 \*

- 高含碳金矿石浮选工艺流程试验研究 ..... 李恒, 张晓民, 祁超, 张小宁, 范娜(10)  
内蒙古某低品位磷矿浮选工艺研究 ..... 秦玉芳, 王其伟, 李娜, 刘章, 李强, 李二斗, 金海龙(17)  
微生物浸出磁黄铁矿的试验研究 ..... 何威, 赵开乐(23)  
红格某选铁尾矿磨矿动力学研究 ..... 何逵, 库建刚(28)  
采用重浮联合工艺回收低品位微细粒锡石 ..... 何名飞, 高玉德, 卜浩, 孟庆波(33)  
提高大宝山矿首采矿体矿石选矿铜精矿品位的试验研究 ..... 李崇德, 冯宁, 钟国建, 程建龙(37)  
含金高硫铜锌多金属硫化矿浮选分离试验研究 ..... 万宏民, 王重阳, 靳建平(41)  
云南某氧化铜浮选试验研究 ..... 吕超, 赵轩, 梁溢强, 乔吉波, 张晶, 简胜(46)  
云南某难选低品位胶磷矿正一反浮选试验研究 ..... 李向益, 孙广周, 曾茂青, 乐智广(51)  
某高砷高硫微细粒金矿石选冶试验研究 ..... 李杰, 马天寿, 贾锦生, 陈经华, 魏明安(55)  
锌钼混合精矿浮选分离试验研究 ..... 万丽, 高玉德(60)  
微波照射下层理矿石破碎的能耗与粒度研究 ..... 王晓东, 郝家旺(64)  
邦德球磨功指数试验的影响因素 ..... 李欣峰, 印万忠, 贺泽铭, 廖德华, 华建彬, 左蔚然(69)

## \* 选矿设备 \*

- KLM型立磨机在金属矿磨矿中的应用 ..... 周宏喜, 卢世杰, 何建成, 刘国蓉, 孙小旭, 姚建超(73)  
外磁式磁选机应用于铁矿预选抛尾工艺的试验研究 ..... 成磊, 尚红亮, 朱道瑶(78)  
浮选柱在铜钼混合精矿铜钼分离中的应用研究 ..... 黄子令(81)

## \* 选矿药剂 \*

- 阴阳离子混合捕收剂用于中低品位锂云母的浮选试验研究 ..... 王林林, 朱灵燕, 刘跃龙, 刘够生(86)  
CS-6捕收剂用于车河选矿厂锡石浮选试验研究 ..... 张念, 黄润芝(93)

[期刊基本参数]CN 11-1840/TF \* 1949 \* b \* A4 \* 96 \* zh \* P \* ¥20.00 \* 3000 \* 20 \* 2019-03

# NONFERROUS METALS (MINERAL PROCESSING SECTION)

No. 3. 2019

May 2019

Bimonthly

## CONTENTS

### \* Process Mineralogy \*

- Study on Processing Mineralogy of a Refractory Copper-zinc Ore ..... JIANG Huangyi, LU Shuoshi, SONG Zhenguo, CHEN Zhongyu, JIN Jianwen(1)  
Process Mineral Research of Tungsten Ore from a W-Mo Deposit in North Jiangxi ..... YE Shaozhen, HU Chengfan, GAO Ren, WANG Guohua, BU Tao(5)  
  

### \* Mineral Processing Technology \*

  
Experimental Study on the Flotation Flowsheet of High Carbonaceous Gold Ore ..... LI Heng, ZHANG Xiaomin, QI Chao, ZHANG Xiaoning, FAN Na(10)  
Study on Flotation Process of a Low Grade Phosphate Rock in Inner Mongolia ..... QIN Yufang, WANG Qiwei, LI Na, LIU Zhang, LI Qiang, LI Erdou, JIN Hailong(17)  
Experimental Investigation on the Bacterial Leaching of Pyrrhotite ..... HE Wei , ZHAO Kaile(23)  
Grinding Kinetics Study on Iron Tailings from Hongge ..... HE Kui, KU Jiangang(28)  
Recovery of Low-grade Fine Cassiterite by Gravity and Flotation Combined Process ..... HE Mingfei, GAO Yude, BU Hao, MENG Qingbo(33)  
Experimental Research on Improving the Grade of Copper Concentrate from theFirst Mining Body Ore in Dabaoshan Mine ..... LI Chongde ,FENG Ning, ZHONG Jianguo, CHEN Jianlong(37)  
Research on the Flotation Separation Experiment of the Gold Containing High-sulfur Copper-zinc Polymetallic Sulfide Ore ..... WAN Hongmin, WANG Chongyang , JIN Jianping(41)  
Experimental Study on Flotation of a Certain Copper Oxide from Yunnan ..... LV Chao, ZHAO Xuan, LIANG Yiqiang, QIAO Jibo, ZHANG Jing, JIAN Sheng(46)  
Experimental Research on Direct-reverse Flotation Process for a Low Grade Refractory Collophanite in Yunnan ..... LI Xiangyi, SUN Guangzhou, ZENG Maoqing ,LE Zhiguang(51)  
Experimental Study on the Beneficiation and Metallurgy of a High-arsenic and High-sulfur Fine-grained Gold Ore ..... LI Jie, MA Tianshou, JIA Jinsheng, CHEN Jinghua, WEI Ming'an(55)  
Flotation Separation Research on a Zn-Mo Bulk Concentrate ..... WAN Li, GAO Yude(60)  
Study on Energy Consumption and Particle Size of Bedding Ore Breaking under Microwave Irradiation ..... WANG Xiaodong, HAO Jiawang(64)  
Influencing Factors of Bond Ball Mill Work Index Test ..... LI Xinfeng, YIN Wanzhong, HE Zeming, LIAO Dehua, HUA Jianbin, ZUO Weiran(69)

### \* Mineral Processing Equipment \*

- The Application of KLM Vertical Screw Stirred Mill in Metal Mine ..... ZHOU Hongxi, LU Shijie, HE Jiancheng, LIU Guorong, SUN Xiaoxu, YAO Jianchao(73)  
Experimental Research of External Magnet Drum Type Magnetic Separator Used on Pre-concentration Process of Iron Ore ..... CHENG Lei, SHANG Hongliang, ZHU Daoyao(78)  
Experimental Study on Flotation Column in Copper- Molybdenum Separation from Copper- Molybdenum Mixed Concentrate ..... HUANG Ziling(81)

### \* Mineral Processing Reagent \*

- Flotation of Low Grade Lepidolite using Mixed Cationic/Anionic Collectors ..... WANG Linlin, ZHU Lingyan, LIU Yuelong, LIU Gousheng (86)  
Research on CS-6 Collector in the Cassiterite Flotation in Chehe Concentrator ..... ZHANG Nian, HUANG Runzhi(93)

---

**Sponsir**

BGRIMM Technology Group

**Editor and Publisher**

Nonferrous Metal (Mineral Processing Section) Editorial Department

**Address**

Building 23, Zone 18 of ABP, No. 188, South 4th Ring Road West, Beijing 100160, China

**Tel & Fax Number**

010-63299852(Tel)

**Internet Site**

<http://ysxk.bgrimm.cn>

**Executive Editor**

YANG Lijun

**Printer**

Langfang Jinhongyu Printing Co. LTD

---



# 中能矿机

## 絮凝剂自动化加药一体化设备

## 浮选机、浓密机专业生产厂家



深锥膏体浓密机

## 安徽中能矿机制造有限公司

地址：安徽省淮北市濉溪经济开发区

电话：0561-6068900

热线：15212631188 15756159188

邮箱：a87945298@163.com

网址：[www.ahznkj.net](http://www.ahznkj.net), [www.sinominingmach.com](http://www.sinominingmach.com)