

## 《岩石矿物学杂志》2014年总目次

### 第33卷 第1期

#### 专题研究

- 滇西“三江”地区临沧花岗岩基中三叠世碱长花岗岩的发现及其意义 ... 廖世勇, 尹福光, 王冬兵, 唐 淵, 孙志明, 孙 浩 (1)  
阿尔泰南缘可可托海地区二厂房岩体 LA-ICP-MS 锆石 U-Pb 年代学、岩石成因及其地质意义 .....  
..... 张亚峰, 范新望, 郭岐明, 吕军利, 赵端昌, 王 星, 王 旭 (13)  
新疆西南天山哈布腾苏河高压-超高压变质带中榴辉岩和蓝片岩的岩石学及变质演化 .....  
..... 施建荣, 刘福来, 刘平华, 孟 恩, 刘超辉, 杨 红, 王 舶, 蔡 佳 (29)  
鄂尔多斯盆地华庆地区长 6 油层组砂岩成岩相及储层质量评价 ..... 兰叶芳, 邓秀芹, 程党性, 黄锦绣 (51)  
藏南扎西康铅锌银锑多金属矿多期多阶段成矿特征及其指示意义 .....  
..... 梁 维, 郑远川, 杨竹森, 李振清, 刘英超, 刘云飞, 李秋耘, 孙清钟, 付 强, 侯增谦 (64)  
新疆西天山艾日星其垦铜钼矿床成矿过程及其找矿潜力 ..... 马 元, 黄 河, 张招崇, 金子梁 (79)  
国内首次发现的束磷钙铀矿的矿物学特征 ..... 范 光, 于阿朋, 葛祥坤, 马立奎, 王全涛 (95)  
大兴安岭五岔沟地区中生代粗安岩中斜长石环带特征及其地质意义 ..... 牛之建, 刘 跃, 狄永军 (102)  
河南窑场和辽宁思山岭铁矿磁铁矿矿物学和氧同位素特征对比——对 BIF 型铁矿成因与形成环境的启示 .....  
..... 孟旭阳, 张东阳, 闫兴虎, 申俊峰, 王 鹏, 田 磊, 梁明媚 (109)  
云南金厂河铁铜铅锌多金属矿床矽卡岩矿物学特征及蚀变分带 .....  
..... 黄 华, 张长青, 周云满, 刘 博, 谢永富, 董云涛, 杨春海, 董文伟 (127)  
鄂东南地区鸡笼山矽卡岩金矿床的矽卡岩矿物学特征及其意义 ..... 王 建, 谢桂青, 余长发, 朱乔乔, 李 伟, 杨庆雨 (149)  
赣东北晚白垩世橄榄玄粗岩系列火山岩中单斜辉石矿物化学及其地质意义 ..... 王佳玲, 巫建华 (163)
- #### 综述与进展
- 硬柱石榴辉岩岩石学研究进展 ..... 杜瑾雪, 张立飞 (174)  
热液矿床中萤石的稀土元素地球化学及其地质意义 ..... 孙海瑞, 黄智龙, 周家喜, 冷成彪, 甘 婷 (185)  
应用矿物学未来和发展——第十一届国际应用矿物学大会综述 ..... 赵学钦, 董发勤 (194)
- #### 花岗岩新思维问题讨论(9)
- 广西型花岗岩的地球化学特征及其构造意义 ..... 张 旗 (199)
- #### 其他
- 致谢 ..... (108)  
《岩石矿物学杂志》荣获“2013 中国最具国际影响力学术期刊”称号 ..... (148)

### 第33卷 第2期

#### 专题研究

- 内蒙古海莫赛格酸性火山岩锆石 U-Pb 年龄、地球化学特征及其意义 ..... 程银行, 滕学建, 李艳锋, 杨俊泉, 彭丽娜, 李 影, 刘 洋 (211)  
辽西台里地区新太古代片麻岩杂岩的形成时代、岩石成因和地质意义 .....  
..... 蔡丽斌, 金 巍, 郑培奎, 张家辉, 李 斌, 王庆龙 (226)  
安徽金寨县沙坪沟钼矿成矿岩体矿物学特征及其成岩成矿意义 ..... 阳 珊, 姜章平, 袁晓玲, 王 枫, 张 青, 遇 祯 (243)  
鄂尔多斯盆地伊金霍洛旗附近二叠系石千峰组岩石学、地球化学特征及其固碳能力分析 .....  
..... 刘娜娜, 刘 立, 明晓冉, 王福刚, 宋土顺, 王力娟 (255)

- 安徽庐枞盆地砖桥深部钻孔内电气石对铀钍成矿流体在高温阶段的指示意义 ..... 熊 欣, 徐文艺, 吕庆田, 贾丽琼, 李 骏 (263)
- 太行山北段王安镇岩基超镁铁质岩中角闪石成因意义 ..... 翟媛媛, 谢锦程, 董国臣 (273)
- 西藏龙马拉 Cu-Fe-Pb-Zn 多金属矿床金云母 Ar-Ar 定年及其地球动力学意义 ..... 付 强, 杨竹森, 郑远川, 黄克贤, 段连峰 (283)
- 西藏知不拉铜多金属矿床地质、石榴子石分带特征及其地质意义 ..... 丁 帅, 唐菊兴, 郑文宝, 姚晓峰 (294)
- 西藏冈底斯南缘碰撞后渐新世成矿作用——来自帕南钼矿床的 Re-Os 同位素年龄证据 ..... 段连峰, 李 为, 郑远川, 梁 维, 付 强, 李秋耘 (307)
- 内蒙古 1017 高地银多金属矿床流体包裹体特征与同位素地球化学 ..... 孙 磊, 王治华, 葛良胜, 常春郊, 丛润祥, 张慧玉 (317)
- 新疆西准噶尔包古图金矿微量元素地球化学研究 ..... 安 芳, 朱永峰 (329)
- 广西德保县荣华锰矿床地质特征研究 ..... 裴秋明, 李社宏, 苑鸿庆, 刘建强, 刘 祥, 曹华文 (343)
- 山东昌邑莲花山铁矿矿床地质与矿石稀土、微量元素特征 ..... 王金辉, 王巧云, 刘汉栋, 王立功 (355)
- 环境矿物学**
- 褐铁矿和白云石对垃圾渗滤液厌氧消化增强作用的初步研究 ..... 庆承松, 韦 玲, 陈天虎, 周跃飞, 王 进, 岳正波 (365)
- 天然黄铁矿对阳离子有机染料 RhB 吸附特性研究 ..... 蔡 宽, 熊世威, 张欣欣, 李瑞萍, 黄应平 (370)
- 工业膨胀蛭石对水体中磷的去除研究 ..... 金诗迪, 秦文莉, 夏枚生, 叶 瑛, 韩兵男 (377)
- 高温下 TiO<sub>2</sub> 的相转变动力学及后期颗粒生长研究 ..... 王 玲, 王河锦, 周 钊, 苑 蕾 (385)
- 基于热重分析的菱镁矿分解动力学解析 ..... 张 强, 何宏平, 陶 奇 (391)
- 宝玉石矿物学**
- 辽宁营口蛇纹石玉成因分析 ..... 王长秋, 叶立金 (397)
- 其他**
- 《硅酸盐通报》征稿启事 ..... (384)

### 第33卷 第3期

#### 专题研究

- 南岭西段加里东期苗儿山岩体锆石 SHRIMP U-Pb 年龄、地球化学特征及其构造意义 ..... 柏道远, 钟 响, 贾朋远, 熊 雄, 黄文义 (407)
- 河南嵩县庙岭金矿区花岗斑岩锆石 U-Pb 年龄、岩石地球化学和 Sr-Nd-Pb 同位素特征 ..... 李正远, 叶会寿, 曹 晶, 张兴康, 翟 雷 (424)
- 柴北缘都兰地区含石榴石、蓝晶石片麻岩的变质演化历史 ..... 于胜尧, 张建新, 宫江华, 李云帅 (441)
- 大兴安岭嫩江地区中生代双峰式火山岩锆石 U-Pb 定年、地球化学特征及其地质意义 ..... 刘 阁, 吕新彪, 陈 超, 杨永胜, 王庆军, 孙耀锋 (458)
- 滇西兰坪盆地西缘火山岩 LA-ICP-MS 锆石 U-Pb 年代学、地球化学特征及其大地构造意义 ..... 范金伟, 杨天南, 梁明媚, 史鹏亮 (471)
- 北京周边二叠系山西组泥岩地球化学特征及其地质意义 ..... 刘清俊, 林海亮, 柯柏林, 林天懿, 尹腾宇, 付昌鸿, 赵连海, 邢 罂 (491)
- 西藏伦坡拉盆地丁青湖组油页岩地球化学特征及其地质意义 ..... 谢尚克, 杜佰伟, 王 剑, 董 宇 (503)
- 我国首次发现的天然硅铋石的矿物学研究 ..... 王星星, 李国武, 杨光明, 刘知纲 (511)
- 甘肃龙首山碱交代型铀矿床绿泥石特征及意义 ..... 魏正宇, 张树明, 刘金枝, 陈云杰, 傅成铭, 张 良 (517)
- 北大巴山高桥地区镁铁质岩单斜辉石矿物化学特征及其指示意义 ..... 王坤明, 王宗起, 张英利, 王 刚 (527)
- 新疆霍什布拉克铅锌矿床微量元素地球化学 ..... 李志丹, 薛春纪, 董新丰, 王思程, 张 岩 (540)
- 西藏雄村斑岩铜金矿床金的赋存状态及其意义 ..... 黄 勇, 唐菊兴, 张 丽 (551)
- 环境矿物学**
- 不同产地煤系高岭土的矿物学特征及插层复合物的制备 ..... 陆银平, 邢学玲, 刘钦甫 (561)

- 用于除硅的铝盐改性膨润土的制备与表征 ..... 林 涛, 李 雪, 徐永建, 张鼎军, 朱振峰 (567)  
新疆煤中钴的分布、赋存特征及成因分析 ..... 李宝庆, 庄新国, 赵仕华 (574)  
**宝玉石矿物学**  
含霞石翡翠的成因研究 ..... 韩辰婧, 王雅政 (581)  
**方法与应用**  
多种矿物流体包裹体中液相阴阳离子的同时测定 ..... 杨 丹, 徐文艺 (591)  
**其他**  
《硅酸盐通报》征稿启事 ..... (502)

## 第33卷 第4期

**专题研究**

- 新疆白干湖地区花岗岩年代学、地球化学研究及其构造意义 ..... 王增振, 韩宝福, 丰成友, 李国臣 (597)  
武夷地块中古元古代镁铁质-超镁铁质岩石的发现——剖面介绍及岩石学、岩相学、年代学特征 ..... 汪建国, 余盛强, 赵旭东, 吴 鸣, 顾明光, 胡艳华 (617)  
青海格尔木市黑海地区三叠系巴颜喀拉山群变质碎屑岩地球化学特征及物源分析 ..... 佟 鑫, 周汉文, 朱云海, 林启祥, 李益龙, 毛武林, 张贊昀, 吴继光, 马智勇 (630)  
江西广丰、玉山盆地橄榄玄粗岩的 SHRIMP 锆石 U-Pb 定年和 Sr-Nd-Pb-O 元素同位素特征 ..... 巫建华, 项媛馨, 钟志菲 (645)  
西昆仑上其木干岩体岩石成因及地质意义——地球化学及 U-Pb 年代学证据 ..... 陈海云, 孙 妍, 包 平, 白 俊, 孙晓东 (657)  
红柳沟北镁铁-超镁铁质岩体矿物学特征及矿石成因分析 ..... 周 伟, 姜常义, 杜 玮, 宋艳芳, 凌锦兰, 夏明哲, 王梦奎, 赵彦锋 (671)

- 青藏高原共和盆地 14.5 cal ka BP 以来粘土矿物响应的气候变化模式 ..... 赵 黎, 孙庆峰 (681)  
澜沧老厂多金属矿床叠加成矿系统稳定同位素对比研究 ..... 刀 艳, 杨 帆, 李 峰, 赵晓勇 (693)  
宜章县长城岭浅成花岗质岩浆隐爆机制及找矿意义探讨 ..... 张术根, 钱丽华, 刘贤红 (707)  
黑龙江乌拉嘎金矿成矿热力学参数研究 ..... 尹淑革, 李永兵, 田会全, 刘善琪 (720)

**综述与进展**

- 脉状铅锌(铜、银)多金属热液矿床研究进展 ..... 贾敬伍, 张洪瑞, 胡茂德 (726)  
堇青石合成的研究进展 ..... 张 巍 (747)  
加强前寒武纪条带状铁建造中伴生矿床的研究 ..... 沈其韩, 宋会侠 (763)  
西南天山造山带超高压变质作用研究新进展 ..... 吕 增, 张立飞 (770)  
**方法与应用**  
玄武岩钛同位素分析标准物质研制 ..... 唐索寒, 李 津, 闫 斌 (779)  
花岗岩新思维问题讨论(10)  
大陆花岗岩的地球动力学意义 ..... 张 旗 (785)

## 第33卷 第5期

**专题研究**

- 西天山特克斯县北乌孙山大哈拉军山组火山岩地球化学特征及构造意义 ..... 孙吉明, 白建科, 马中平, 徐学义, 李智佩, 张 涛, 翁 凯 (799)  
江西大岭上钨矿花岗斑岩锆石特征、成因及意义 ..... 彭花明, 夏 菲, 严兆彬, 杜后发, 袁 琪 (811)  
东升庙多金属硫化物矿床主要含矿岩系地质地球化学特征及对矿床成因的指示意义 ..... 高兆富, 朱祥坤, 罗照华, 孙 剑, 张飞飞, 高文革, 王炳林, 钟畅怀 (825)  
新疆西天山尼新塔格铁矿床地质特征与矿床成因 ..... 荆德龙, 张 博, 汪帮耀, 夏明哲, 夏昭德, 姜常义, 李新光 (841)  
北秦岭南台钼多金属矿床成矿流体和稳定同位素研究 ..... 柯昌辉, 王晓霞, 杨 阳, 吕星球, 聂政融, 李金宝, 齐秋菊, 王顺安 (859)  
山东蒙阴金伯利岩中石榴石特征及种类划分 ..... 迟广成, 伍 月, 胡建飞 (877)

- 粤东新寮岽多金属矿床绿泥石特征及其地质意义 ..... 王小雨, 毛景文, 程彦博, 张兴康, 刘 鹏, 刘石华, 方思傑 (885)  
 藏西南札达白垩纪海绿石的形成机制及控制因素 ..... 李 响 (906)  
 川南玄武岩气孔中硅铁灰石杏仁体的特征与研究 ..... 张良鉅, 刘靖娜, 曾伟来, 李东升, 黎 琦, 曾南石, 阮青锋 (917)  
 青海虎头崖铅锌矿床闪锌矿化学成分特征研究 ..... 雷 浩, 王智琳, 鲁安怀, 谷湘平, 易立文 (924)  
 浙西开化石龙头金矿含金黄铁矿的成分标型及硫同位素特征研究 ..... 曹素巧, 贾锦生, 钟增球, 洪汉烈, 王朝文, 般 科, 程 峰, 叶 茜 (937)  
 松辽盆地 F 油层高岭石、伊利石对储层物性、敏感性影响的实验研究 ..... 赵振铎, 闫百泉 (947)  
**综述与进展**  
 对与氧逸度有关的花岗岩类成矿专属性-含矿性问题的再思考 ..... 赵 博, 张德会, 石成龙, 张荣臻 (955)  
 非传统稳定同位素锗的测试进展及其地质应用 ..... 朱传威, 温汉捷, 樊海峰, 张羽旭, 刘 洁 (965)  
 海绿石的成因、指相作用及其年龄意义 ..... 陈淑慧, 李 云, 胡作维, 李小平, 马永坤, 朱 平, 陈安清 (971)  
**环境矿物学**  
 温室气体 CO<sub>2</sub> 与钠长石相互作用实验研究 ..... 郭晓静, 曲希玉, 程慧慧, 姜 伟, 肖 洪 (980)

### 第33卷 第6期

#### 专题研究

- 内蒙古阿拉善盟北部宗乃山中酸性侵入岩年代学、地球化学及构造意义 ..... 史兴俊, 张 磊, 王 涛, 肖序常, 童 英, 张建军, 耿建珍, 叶 珺 (989)  
 中祁连西段晚寒武世埃达克岩的发现及地质意义 ..... 黄增保, 郑建平, 李葆华, 魏志军, 漆 瑋, 许延龙 (1008)  
 郊庐断裂山东段(胶东)中生代中酸性火山岩的锆石 U-Pb 年代学及地球化学特征 ..... 曹光跃, 薛怀民, 王金光 (1019)  
 西藏多龙矿集区花岗闪长斑岩地球化学特征及其意义 ..... 符家骏, 赵元艺, 郭 硕 (1039)  
 山西临县紫金山碱性杂岩体 SHRIMP 锆石 U-Pb 年龄、地球化学和 Sr-Nd-Hf 同位素研究 ..... 王亚莹, 蔡剑辉, 阎国翰, 周伟伟, 闫志娇 (1052)  
 西准噶尔吾尔喀什尔山库鲁木苏岩基解体的锆石 U-Pb 年代学证据 ..... 张胜龙, 李永军, 焦光磊, 易善鑫, 孙 勇, 杨 洋, 王军年 (1073)  
 云南会泽超大型铅锌矿床 HTD 白云岩的厘定及其形成机制 ..... 文德潇, 韩润生, 王 峰, 贺姣姣, 邱文龙, 夏颜乐, 陈随海, 倪尔建 (1086)  
 新疆西天山哈勒尕提-木祖克铁铜铅锌矿床地质特征及成矿条件分析 ..... 王新利, 顾雪祥, 彭义伟, 章永梅, 章幼惠, 张力强, 何 格, 周 超, 许 杨 (1099)  
 西藏扎西康铅锌多金属矿床原生晕特征 ..... 卿成实, 丁 俊, 周 清, 吴建阳, 董 磊, 董随亮, 夏祥标, 李晓霞, 冯韶东 (1113)  
 西藏嘎拉勒金铜矿床<sup>40</sup>Ar/<sup>39</sup>Ar 同位素年龄及地质意义 ..... 张 雄, 杨竹森, 何 林 (1127)  
 变质岩中锆石在薄片下的原位阴极发光研究 ..... 周丽芹, 李 宁, 董春艳, 万渝生 (1134)  
 西藏嘎拉勒铜金矿床金和银的赋存状态研究 ..... 何建娟, 肖渊甫, 郭 龙, 王瑜亮, 常 静, 赵亚男 (1143)  
**环境矿物学**  
 硅酸钙晶种法回收污水中磷的实验研究 ..... 孙 华, 郑 红, 马鸿文, 李 雍 (1151)  
 羟基磷灰石对水溶液中 Fe<sup>3+</sup> 的吸附动力学及热力学研究 ..... 周珍旭, 钱功明, 李 道, 王发杰 (1157)  
**其他**  
 2013 年度部分地质学类期刊主要计量指标一览表 ..... (1072)  
 《岩石矿物学杂志》2014 年总目次 ..... (1161)

**Acta Petrologica et Mineralogica****2014 (Vol. 33)****Contents****No. 1**

- The discovery of Middle Triassic alkali feldspar granite from the giant Lincang batholith in southern Three River region and its geological implications ..... LIAO Shi-yong, YIN Fu-guang, WANG Dong-bing, TANG Yuan, SUN Zhi-ming and SUN Jie (1)
- LA-ICP-MS U-Pb geochronology and petrogenesis of Erchangfang plutons in Koktokay area of southern Altay and their geological implications ..... ZHANG Ya-feng, LIN Xin-wang, GUO Qi-ming, LÜ Jun-li, ZHAO Duan-chang, WANG Xing and WANG Xu (13)
- Petrologic characteristics and metamorphic evolution of eclogites and blueschists from the high-to ultrahigh-pressure metamorphic belt in Habutengsu Valley, southwestern Tianshan, Xinjiang ..... SHI Jian-rong, LIU Fu-lai, LIU Ping-hua, MENG En, LIU Chao-hui, YANG Hong, WANG Fang and CAI Jia (29)
- Diagenetic facies and reservoir quality evaluation of Chang 6 sandstone reservoir in the upper Triassic Yanchang Formation of Huqing area, Ordos Basin ..... LAN Ye-fang, DENG Xiu-qin, CHENG Dang-xing and HUANG Jin-xiu (51)
- Multiphase and polystage metallogenic process of the Zhaxikang large-size Pb-Zn-Ag-Sb polymetallic deposit in southern Tibet and its implications ..... LIANG Wei, ZHENG Yuan-chuan, YANG Zhu-sen, LI Zhen-qing, LIU Ying-chao, LIU Yun-fei, LI Qiu-yun, SUN Qing-zhong, FU Qiang and HOU Zeng-qian (64)
- Ore-forming process and prospecting potential of the Airikenqiken Cu (Mo) ore district in the West Tianshan Mountains, Xinjiang ..... MA Yuan, HUANG He, ZHANG Zhao-chong and JIN Zi-liang (79)
- Mineralogy of phurealite discovered for the first time in China ..... FAN Guang, YU A-peng, GE Xiang-kun, MA Li-kui and WANG Quan-tao (95)
- Zoning characteristics of the plagioclase from the Mesozoic trachyandesite in Wuchagou area of the Da Hinggan Mountains and its geological implications ..... NIU Zhi-jian, LIU Yue and DI Yong-jun (102)
- A comparative study of mineralogical and oxygen isotope characteristics between the Yaochang iron deposit in Henan Province and the Sishanling iron deposit in Liaoning Province: Insights into ore genesis and forming environment of BIF ..... MENG Xu-yang, ZHANG Dong-yang, YAN Xing-hu, SHEN Jun-Feng, WANG Peng, TIAN Lei and LIANG Ming-juan (109)
- Skarn mineralogy and zoning model of the Jinchanghe copper-zinc-iron polymetallic deposit in Yunnan Province ..... HUANG Hua, ZHANG Chang-qing, ZHOU Yun-man, LIU Bo, XIE Yong-fu, DONG Yun-tao, YANG Chun-hai and DONG Wen-wei (127)
- Geological and skarn mineral characteristics of the Jilongshan skarn Au deposit in southeastern Hubei Province ..... WANG Jian, XIE Gui-qing, YU Zhang-fa, ZHU Qiao-qiao, LI Wei and YANG Qing-yu (149)
- Mineral chemistry of clinopyroxenes from the Late Cretaceous shoshonitic volcanic rocks in Northern Jiangxi Province and its geological significance ..... WANG Jia-ling and WU Jian-hua (163)
- Progress in petrologic study of lawsonite-bearing eclogites ..... DU Jin-xue and ZHANG Li-fei (174)
- Rare earth elements geochemistry of fluorite in hydrothermal deposits and its geological significance ..... SUN Hai-rui, HUANG Zhi-long, ZHOU Jia-xi, LENG Cheng-biao and GAN Ting (185)

- Applied mineralogy and its future: A review of the 11<sup>th</sup> International Congress for Applied Mineralogy ..... ZHAO Xue-qin and DONG Fa-qin (194)  
Geochemistry of the Guangxi-type granite and its tectonic implications ..... ZHANG Qi (199)

## No. 2

- Geochronology, geochemistry and geological significance of felsic volcanic rocks in Haimosaige area, Inner Mongolia ..... CHENG Yin-hang, TENG Xue-jian, LI Yan-feng, YANG Jun-quan, PENG Li-na, LI Ying and LIU Yang (211)  
Geochronology, petrogenesis and geological significance of the Neoarchaean gneiss complex in Taili area of western Liaoning Province ..... CAI Li-bin, JIN Wei, ZHENG Pei-xi, ZHANG Jia-hui, LI Bin and WANG Qing-long (226)  
Mineralogy of ore-hosting intrusions of the Shapinggou molybdenum deposit in Jinzhai County of Anhui Province and its implications for petrogenesis and mineralization ..... YANG Shan, JIANG Zhang-ping, YUAN Xiao-ling, WANG Feng, ZHANG Qing and YU Zhen (243)  
Petrologic and geochemical characteristics and carbon sequestration capability of the Permian Shiqianfeng Formation around Ejin Horo Banner of Ordos Basin ..... LIU Na-na, LIU Li, MING Xiao-ran, WANG Fu-gang, SONG Tu-shun and WANG Li-juan (255)  
Tourmaline as an early stage indicator of uranium mineralization in the deep drilling, Luzong Basin, Anhui Province ..... XIONG Xin, XU Wen-ji, LÜ Qing-tian, JIA Li-qiong and LI Jun (263)  
The genetic significance of amphiboles from the ultramafic rocks of Wang'anzhen batholith in northern Taihang Mountains ..... ZHAI Yuan-yuan, XIE Jin-cheng and DONG Guo-chen (273)  
Ar-Ar age of phlogopite from the Longmala copper-iron-lead-zinc deposit in Tibet and its geodynamic significance ..... FU Qiang, YANG Zhu-sen, ZHENG Yuan-chuan, HUANG Ke-xian and DUAN Lian-feng (283)  
Geological and garnet zoning characteristics of the Zhibula copper polymetallic deposit in Tibet and their significance ..... DING Shuai, TANG Ju-xing, ZHENG Wen-bao and YAO Xiao-feng (294)  
Post-collisional Oligocene metallogenic process in southern margin of Gandise belt: Evidence from Re-Os dating of molybdenite from the Pa'nan porphyry Mo deposit ..... DUAN Lian-feng, LI Wei, ZHENG Yuan-chuan, LIANG Wei, FU Qiang and LI Qiu-yun (307)  
Fluid inclusions characteristics and isotopic geochemistry of the Highland 1017 Ag polymetallic deposit in Dong Ujimqin Banner, Inner Mongolia ..... SUN Lei, WANG Zhi-hua, GE Liang-sheng, CHANG Chun-jiao, CONG Run-xiang and ZHANG Hui-yu (317)  
Trace elements geochemistry of the Baogutu gold deposit in Western Junggar, Xinjiang ... AN Fang and ZHU Yong-feng (329)  
Geological characteristics of the Ronghua manganese deposit in Debao County, Guangxi ..... PEI Qiu-ming, LI She-hong, YUAN Hong-qing, LIU Jian-qiang, LIU Xiang and CAO Hua-wen (343)  
Geology, ore REE and trace elements characteristics of the Lianhuashan iron ore deposit in Changyi County, Shandong Province ..... WANG Jin-hui, WANG Qiao-yun, LIU Han-dong and WANG Li-gong (355)  
The enhancement of anaerobic digestion of landfill leachate by limonite and dolomite ..... QING Cheng-song, WEI Ling, CHEN Tian-hu, ZHOU Yue-fei, WANG Jin and YUE Zheng-bo (365)  
Adsorption characteristics of cationic organic dye RhB on pyrite ..... CAI Kuan, XIONG Shi-wei, ZHANG Xin-xin, LI Rui-ping and HUANG Ying-ping (370)  
A study of phosphorus adsorption of industrial expanded vermiculite ..... JIN Shi-di, QIN Wen-li, XIA Mei-sheng, YE Ying and HAN Bing-nan (377)  
A kinetic study of the phase transformation of TiO<sub>2</sub> and particle growth at high temperature ..... WANG Ling, WANG He-jin, ZHOU Zhao and YUAN Lei (385)

- Decomposition kinetics of magnesite deduced from thermogravimetric analysis ..... ZHANG Qiang, HE Hong-ping and TAO Qi (391)  
A genetic analysis of the Yingkou serpentinite jade deposit in Liaoning Province ..... WANG Chang-qiu and YE Li-jin (397)

### No. 3

- Zircon SHRIMP U-Pb dating and geochemistry of Caledonian Miao'ershan pluton in the western part of the Nanling Mountains and their tectonic significance ..... BAI Dao-yuan, ZHONG Xiang, JIA Peng-yuan, XIONG Xiong and HUANG Wen-yi (407)  
Zircon U-Pb age, geochemistry and Sr-Nd-Pb isotopic compositions of the granite porphyry in the Miaoling gold deposit of Songxian County, Henan Province ..... LI Zheng-yuan, YE Hui-shou, CAO Jing, ZHANG Xing-kang and ZHAI Lei (424)  
Metamorphic evolution of garnet- and kyanite-bearing paragneiss in Dulan area of the North Qaidam Mountains, western China ..... YU Sheng-yao, ZHANG Jian-xin, GONG Jiang-hua and LI Yun-shuai (441)  
Zircon U-Pb chronology and geochemistry of Mesozoic bimodal volcanic rocks from Nenjiang area in Da Hinggan Mountains and their tectonic implications ..... LIU Ge, LÜ Xin-biao, CHEN Chao, YANG Yong-sheng, WANG Qing-jun and SUN Yao-feng (458)  
LA-ICP-MS zircon U-Pb geochronology and geochemistry of volcanic rocks on the western margin of Lanping Basin in western Yunnan and their tectonic implications ..... FAN Jin-wei, YANG Tian-nan, LIANG Ming-juan and SHI Peng-liang (471)  
Geochemical characteristics of Permian Shanxi Formation mudstones in Beijing and their geological significance ..... LIU Qing-jun, LIN Hai-liang, KE Bai-lin, LIN Tian-yi, YIN Teng-yu, FU Chang-hong, ZHAO Lian-hai and XING Gang (491)  
Geochemical characteristics of oil shale member of Dingqinghu Formation in Lunpola Basin of Tibet and their geological implications ..... XIE Shang-ke, DU Bo-wei, WANG Jian and DONG Yu (503)  
Mineralogical studies of eulytite found for the first time in China ..... WANG Xing-xing, LI Guo-wu, YANG Guang-ming and LIU Zhi-gang (511)  
Characteristics and significance of chlorite in the Longshoushan alkali-metasomatic type uranium deposit ..... WEI Zheng-yu, ZHANG Shu-ming, LIU Jin-zhi, CHEN Yun-jie, FU Cheng-ming and ZHANG Liang (517)  
Mineral chemistry characteristics and indication significance of clinopyroxene in mafic rock of Gaoqiao area, North Daba Mountains ..... WANG Kun-ming, WANG Zong-qi, ZHANG Ying-li and WANG Gang (527)  
Trace element geochemistry of the Huoshibulake zinc-lead deposit, Xinjiang ..... LI Zhi-dan, XUE Chun-ji, DONG Xin-feng, WANG Si-cheng and ZHANG Yan (540)  
Gold in the Xiongcun porphyry copper-gold deposit, Tibet: Its distribution and significance ..... HUANG Yong, TANG Ju-xing and ZHANG Li (551)  
Mineralogical characteristics and intercalation composite preparation of kaolin in coal measures of different coal-producing areas ..... LU Yin-ping, XING Xue-ling and LIU Qin-fu (561)  
The preparation and characterization of aluminum salt modified bentonite in desilication ..... LIN Tao, LI Xue, XU Yong-jian, ZHANG Ding-jun and ZHU Zhen-feng (567)  
The distribution, modes of occurrence and genesis of cobalt in coals of Xinjiang ..... LI Bao-qing, ZHUANG Xin-guo and ZHAO Shi-hua (574)  
The petrogenesis of nepheline jade ..... HAN Chen-jing and WANG Ya-mei (581)  
Ion chromatogram method for the determination of liquid composition of fluid inclusions in several common minerals by using a trace amount of sample ..... YANG Dan and [XU Wen-yi] (591)

## No. 4

- Geochronology, geochemistry and tectonic significance of granites in Baiganhu area, Xinjiang .....  
..... WANG Zeng-zhen, HAN Bao-fu, FENG Cheng-you and LI Guo-chen (597)
- The discovery of Paleoproterozoic mafic-ultramafic rocks in the Wuyishan Block: Description of profile and characteristics of petrology, petrography and isotope geochronology .....  
..... WANG Jian-guo, YU Sheng-qiang, ZHAO Xu-dong, WU Ming, GU Ming-guang and HU Yan-hua (617)
- Geochemical characteristics and provenance analysis of the Triassic metasedimentary rocks of Bayan Har Group in Hehai area, Golmud City, Qinghai Province ..... TONG Xin, ZHOU Han-wen, ZHU Yun-hai, LIN Qi-xiang, LI Yi-long, MAO Wu-lin, ZHANG Yun-yun, WU Ji-guang and MA Zhi-yong (630)
- SHRIMP zircon U-Pb dating and Sr-Nd-Pb-O isotope characteristics of shoshonite from Guangfeng and Yushan basins in Jiangxi Province ..... WU Jian-hua, XIANG Yuan-xin and ZHONG Zhi-fei (645)
- Petrogenesis and geological significance of Shangqimugan plutons in Western Kunlun: Evidence from geochemistry and U-Pb chronology ..... CHEN Hai-yun, SUN Yan, BAO Ping, BAI Jun and SUN Xiao-dong (657)
- Mineralogical characteristics and ore genesis of the Hongliugoubei mafic-ultramafic intrusion ..... ZHOU Wei, JIANG Chang-ji, DU Wei, SONG Yan-fang, LING Jin-lan, XIA Ming-zhe, WANG Meng-xi and ZHAO Yan-feng (671)
- The climate and environment model indicated by clay mineral response since 14.5 cal ka BP in Gonghe Basin, the Tibetan Plateau ..... ZHAO Li and SUN Qing-feng (681)
- A comparative study of stable isotopes of superimposed metallogenic systems in the Laochang polymetallic deposit, Yunnan Province ..... DAO Yan, YANG Fan, LI Feng and ZHAO Xiao-yong (693)
- The cryptoexplosive mechanism of the hypabyssal granitic magma in Changchengling area, Yizhang County, Hunan Province, and its implications for mineral prospecting ..... ZHANG Shu-gen, QIAN Li-hua and LIU Xian-hong (707)
- A study of thermodynamic parameters of the Wulaga gold deposit, Heilongjiang Province ..... YIN Shu-ping, LI Yong-bing, TIAN Hui-quan and LIU Shan-qi (720)
- The progress in the study of vein Pb-Zn-Cu-Ag polymetallic epithermal deposits ..... JIA Jing-wu, ZHANG Hong-rui and HU Mao-de (726)
- The progress in researches on cordierite material synthesis ..... ZHANG Wei (747)
- On the strengthening of the research on Au, Mn, Pb-Zn, Cu and Ni ore deposits associated with Precambrian banded iron formation ..... SHEN Qi-han and SONG Hui-xia (763)
- New progress in the study of UHP metamorphism of China's southwestern Tianshan orogenic belt ..... LÜ Zeng and ZHANG Li-fei (770)
- The preparation of reference material for titanium isotope measurement of basalt ..... TANG Suo-han, LI Jin and YAN Bin (779)
- Geodynamic implications of continental granites ..... ZHANG Qi (785)

## No. 5

- Geochemical characteristics and tectonic implications of Wusunshan volcanic rocks in northern Tekes County of West Tianshan Mountains .....  
..... SUN Ji-ming, BAI Jian-ke, MA Zhong-ping, XU Xue-yi, LI Zhi-pei, ZHANG Tao and WENG Kai (799)
- Features, genesis and geological significance of zircons from the granite porphyry in the Dalingshang tungsten deposit, Jiangxi Province ..... PENG Hua-ming, XIA Fie, YAN Zhao-bin, DU Hou-fa and YUAN Qi (811)
- Geological and geochemical characteristics of the main ore-bearing rock series in the Dongshengmiao superlarge polymetallic

- sulfide deposit and their implications for ore genesis ..... GAO Zhao-fu, ZHU Xiang-kun, LUO Zhao-hua, SUN Jian, ZHANG Fei-fei, GAO Wen-ge, WANG Bing-lin and ZHONG Chang-huai (825)
- Geological characteristics and ore genesis of the Nixintage iron deposit in West Tianshan Mountains, Xinjiang ..... JING De-long, ZHANG Bo, WANG Bang-yao, XIA Ming-zhe, XIA Zhao-de, JIANG Chang-yi and LI Xin-guang (841)
- Fluid inclusion and stable isotope study of the Nantai molybdenum polymetallic deposit in North Qinling Mountains ..... KE Chang-hui, WANG Xiao-xia, YANG Yang, LÜ Xing-qiu, NIE Zheng-rong, LI Jin-bao, QI Qiu-ju and WANG Shun-an (859)
- The characteristics and classification of garnets from kimberlite in Mengyin, Shandong Province ..... CHI Guang-cheng, WU Yue and HU Jian-fei (877)
- Characteristics of chlorite from the Xinliaodong Cu polymetallic deposit in eastern Guangdong Province and their geological significance ..... WANG Xiao-yu, MAO Jing-wen, CHENG Yan-bo, ZHANG Xing-kang, LIU Peng, LIU Shi-hua and FANG Si-jie (885)
- Mechanism and factors controlling the formation of glauconite: Evidence from the Cretaceous glauconite in Zanda, southwestern Tibet ..... LI Xiang (906)
- Characteristics of babingtonite amygdaloid complex in vesicular basalt from south Sichuan ..... ZHANG Liang-ju, LIU Jing-na, ZENG Wei-lai, LI Dong-sheng, LI Qi, ZENG Nan-shi and RUAN Qing-feng (917)
- A typomorphic study of sphalerite from the Hutouya Pb-Zn deposit in Qinghai Province ..... LEI Hao, WANG Zhi-lin, LU An-huai, GU Xiang-ping and YI Li-wen (924)
- Composition and sulfur isotope characteristics of auriferous pyrite from the Shilongtou gold deposit in Kaihua, western Zhejiang Province ..... CAO Su-qiao, JIA Jin-sheng, ZHONG Zeng-qiu, HONG Han-lie, WANG Chao-wen, YIN Ke, CHENG Feng and YE Han (937)
- Effects of kaolinite and illite on physical property and sensitivity damage in the F reservoir of the Songliao Basin ..... ZHAO Zhen-duo and YAN Bai-quan (947)
- Rethinking of the metallogenic specialization and ore-bearing potential of redox-related granitoid ..... ZHAO Bo, ZHANG De-hui, SHI Cheng-long and ZHANG Rong-zhen (955)
- Analytical technique for germanium stable isotopes and its geological applications ..... ZHU Chuan-wei, WEN Han-jie, FAN Hai-feng, ZHANG Yu-xu and LIU Jie (965)
- Genesis, diagnostic role and age significance of glauconites ..... CHEN Shu-hui, LI Yun, HU Zuo-wei, LI Xiao-ping, MA Yong-kun, ZHU Ping and CHEN An-qing (971)
- Experimental research on the possibility of geological storage of greenhouse gas-CO<sub>2</sub> in albite ..... GUO Xiao-jing, QU Xi-yu, CHENG Hui-hui, JIANG Wei and XIAO Hong (980)

## No. 6

- Geochronology and geochemistry of the intermediate-acid intrusive rocks from Zongnaishan area in northern Alxa, Inner Mongolia, and their tectonic implications ..... SHI Xing-jun, ZHANG Lei, WANG Tao, XIAO Xu-chang, TONG Ying, ZHANG Jian-jun, GENG Jian-zhen and YE Ke (989)
- The discovery of Late Cambrian adakite in the western Central Qilian Mountain and its geological implications ..... HUANG Zeng-bao, ZHENG Jian-ping, LI Bao-hua, WEI Zhi-jun, QI Wei and XU Yan-long (1008)
- Zircon U-Pb age and geochemistry of Mesozoic intermediate and acidic volcanic rocks from the Shandong segment (Jiaodong area) of the Tan-Lu fault ..... CAO Guang-yue, XUE Huai-min and WANG Jin-guang (1019)
- Geochemical characteristics and significance of granodiorite porphyry in the Duolong ore concentration area, Tibet ..... FU Jia-jun, ZHAO Yuan-yi and GUO Shuo (1039)

- SHRIMP zircon U-Pb age, geochemistry and Sr-Nd-Hf isotopic characteristics of the Zijinshan alkaline complex in Linxian County, Shanxi Province ..... WANG Ya-ying, CAI Jian-hui, YAN Guo-han, ZHOU Wei-wei and YAN Zhi-jiao (1052)
- Zircon U-Pb geochronological evidence of the disintegration of the Kulumusu granitic batholith in Wuerkashier, West Junggar Basin ..... ZHANG Sheng-long, LI Yong-jun, JIAO Guang-lei, YI Shan-xin, SUN Yong, YANG Yang and WANG Jun-nian (1073)
- Features and formation mechanism of HTD dolomites in the Huize lead-zinc deposit, Yunnan Province ... WEN De-xiao, HAN Run-sheng, WANG Feng, HE Jiao-jiao, QIU Wen-long, XIA Yan-le, CHEN Sui-hai and NI Er-jian (1086)
- Geological features and ore-forming conditions of the Halegati-Muzuke Fe-Cu-Pb-Zn deposit in West Tianshan Mountains, Xinjiang ..... WANG Xin-li, GU Xue-xiang, PENG Yi-wei, ZHANG Yong-mei, ZHANG You-hui, ZHANG Li-qiang, HE Ge, ZHOU Chao and XU Yang (1099)
- Primary halo characteristics of the Zhaxikang lead-zinc polymetallic deposit, Tibet ..... QING Cheng-shi, DING Jun, ZHOU Qing, WU Jian-yang, DONG Lei, DONG Sui-liang, XIA Xiang-biao, LI Xiao-xia and FENG Shao-dong (1113)
- Ar-Ar isotopic age of phlogopite from the Galale gold-copper deposit in Tibet and its geological significance ..... ZHANG Xiong, YANG Zhu-sen and HE Lin (1127)
- In-situ cathodoluminescence study of zircons in thin sections of metamorphic rocks ..... ZHOU Li-qin, LI Ning, DONG Chun-yan and WAN Yu-sheng (1134)
- The modes of occurrence of gold and silver in the Galale copper gold deposit, Tibet ..... HE Jian-juan, XIAO Yuan-fu, GUO Long, WANG Yu-liang, CHANG Jing and ZHAO Ya-nan (1143)
- Calcium silicate-seeded crystallization for phosphorus recovery from wastewater ..... SUN Hua, ZHENG Hong, MA Hong-wen and LI Yong (1151)
- The adsorption of  $\text{Fe}^{3+}$  ions from aqueous solution by hydroxyapatite: Kinetic and thermodynamic study ..... ZHOU Zhen-xu, QIAN Gong-ming, LI Dao and WANG Fa-jie (1157)