

特邀主编 刘平华 田忠华 杜利林

地 球 科 学

2020年9月 第45卷 第9期

目 次

华北陆块及其周缘前寒武纪地质调查与研究新进展专辑

- 华北克拉通太古宙构造热事件时代及演化 万渝生, 颜顽强, 董春艳, 刘敦一 (3119)
中条山地区涑水杂岩新太古代烟庄正长花岗岩年龄及成因: 对华北克拉通地壳演化的制约 杨崇辉, 杜利林, 宋会侠, 段庆松, 王建龙, 黄智强, 任留东, 耿元生, 王彦斌 (3161)
华北克拉通阜平杂岩新太古代-古元古代多期地质事件及其构造性质 杜利林, 杨崇辉, 宋会侠, 王建龙, 段庆松, 黄智强, 程海峰, 耿元生, 任留东 (3179)
华北克拉通胶北地体多期高级变质事件: 来自石榴斜长角闪岩与花岗质浅色体锆石 U-Pb 定年与稀土元素的新证据 刘平华, 田忠华, 文飞, 周万蓬, 王义龙 (3196)
辽东半岛河栏镇火山-沉积岩构造研究——对古元古代弧后盆地张裂与闭合的启示 田忠华, 许王, 刘利双, 冀磊 (3217)
天镇-怀安地区变质基性岩墙群: 华北克拉通古元古代末期碰撞-伸展构造体制转换标志 张家辉, 王惠初, 郭敬辉, 田辉, 任云伟, 常青松, 施建荣, 相振群 (3239)
集宁地区两类古元古代重熔花岗岩的锆石 U-Pb 年代学及岩石成因 常青松, 王惠初, 施建荣, 任云伟 (3258)
塔里木地块东南缘新太古代安南坝石英闪长片麻岩的成因及其对地壳演化的启示 辜平阳, 计文化, 陈锐明, 庄玉军, 彭璇, 查显锋, 郭亚鹏 (3268)
辽宁宽甸地区辽河群里尔峪组基性火山岩锆石 U-Pb 年代学及其地质意义 陈井胜, 田德欣, 邢德和, 李斌, 刘森, 杨帆, 杨中柱 (3282)
扬子地块西北缘~2.09 Ga 和~1.76 Ga 花岗质岩石: Columbia 超大陆聚合-裂解的岩浆记录 邓奇, 汪正江, 任光明, 崔晓庄, 曹华文, 宁括步, 任飞 (3295)
东阿拉善地块叠布斯格杂岩的形成与变质时代: 来自黑云斜长片麻岩锆石 LA-ICP-MS U-Pb 定年的新证据 邹雷, 刘平华, 刘利双, 王伟, 田忠华 (3313)
华北克拉通南缘小秦岭地区新太古代晚期-古元古代晚期岩浆构造热事件: 锆石 U-Pb-Hf 同位素和地球化学证据 黄道寰, 董春艳, 万渝生 (3330)
鲁西栗杭地区新太古代地质剖面的解剖: 野外研究和 SHRIMP U-Pb 锆石定年 李源, 任鹏, 颜顽强, 谢士稳, 王世进, 宋志勇, 万渝生 (3341)
冀西北怀安杂岩的年代学、地球化学、Nd-Hf-O 同位素组成及其地质意义 郝光明, 颜顽强, 刘永顺, 董春艳, 任鹏, 白文倩, 王树庆, 胡晓佳, 万渝生 (3353)
古元古代全球静寂期岩浆活动——以华北克拉通南缘中条山~2.3 Ga 横岭关花岗岩为例 段庆松, 宋会侠, 杜利林, 任留东, 耿元生, 王建龙, 黄智强, 王彦斌, 杨崇辉 (3372)
华北克拉通孔兹岩带磴口和余太地区花岗片麻岩和斜长角闪岩变质锆石对其北界位置的再约束 段瑞涵, 刘超辉, 施建荣 (3386)
辽东半岛古元古代北辽河群浪子山组巴罗式变质带分布、变质特征及其构造意义 文飞, 田忠华, 刘平华, 向华 (3403)
苏鲁构造杂岩带乳山地区(石榴)斜长角闪岩 P-T 演化轨迹及其地质意义——来自岩石学、矿物化学及相平衡模拟的约束 朱浩忠, 田忠华, 王泽利, 向华, 张书凯 (3420)
冀北崇礼红旗营子岩群中镁铁质岩石地球化学和年代学研究: 对华北克拉通新太古代晚期-古元古代早期大地构造演化的启示 陶光活, 李晓峰, 王军鹏, 蒋康 (3436)
大数据时代基于 DGSS 系统下空间数据库建立的重要性 张广宇, 付俊彧, 欧阳兆灼, 田忠华 (3451)
- *****
- 湘东北新元古代冷家溪群沉积岩的地球化学特征和碎屑锆石 U-Pb 年代学 杨雪, 张玉芝, 崔翔, 虞鹏鹏, 徐文景 (3461)
东天山卡拉塔格地区月牙湾铜镍硫化物矿床磁黄铁矿 Re-Os 同位素测定及其地质意义 吕晓强, 毛启贵, 郭娜欣, 李月臣, 孙燕 (3475)
东营凹陷中央背斜带沙三段砂岩石英次生加大边发育特征及其指示意义 赵文, 何生, 郭小文, 王永诗, 郝雪峰, 熊伟 (3487)
松科 2 井深部高温龟裂岩层封堵型钻井液稳定井壁技术 乌效鸣, 郑文龙, 邹玉亮 (3502)
· 文章荐读 ·
南海北部陆缘深水峡谷体系沉积特征及形成机制 陈慧, 解习农, 毛凯楠, 何云龙, 苏明, 张文彦 (3419)
陆架边缘迁移轨迹与陆坡形态的耦合关系及其深水油气勘探意义: 以东非大陆边缘为例 高梦天, 徐尚, 卓海腾, 王雨轩, 吴少波 (3486)
《地球科学》2020 年 10 月第 45 卷第 10 期要目预告 (3281)

主编 赖旭龙 责任编辑 李根

期刊基本参数: CN 42-1874/P * 1957 * m * A4 * 390 * zh * P * ¥ 50.00 * 1200 * 24 * 2020-09

封面照片: 阿拉善地块阿拉善岩群条带状黑云斜长片麻岩露头宏观远景照片(刘平华提供)

EARTH SCIENCE
Vol.45 No.9 Sept. 2020

CONTENTS

*Special Issue on New Progress in Precambrian Geological Investigation and Study of
the North China Block and Its Adjacent Region*

- Timing of Tectonothermal Events in Archean Basement of the North China Craton Wan Yusheng, Xie Hangjian, Dong Chunyan, Liu Dunyi (3119)
Geochronology and Petrogenesis of Neoarchean Yanzhuang Syenogranites from Sushui Complex in the Zhongtiao Mountains: Implications for the Crustal Evolution of the North China Craton Yang Chonghui, Du Lilin, Song Huixia, Duan Qingsong, Wang Jianlong, Huang Zhiqiang, Ren Liudong, Geng Yuansheng, Wang Yanbin (3161)
Neoarchean-Paleoproterozoic Multi-Stage Geological Events and Their Tectonic Implications in the Fuping Complex, North China Craton Du Lilin, Yang Chonghui, Song Huixia, Wang Jianlong, Duan Qingsong, Huang Zhiqiang, Cheng Haifeng, Geng Yuansheng, Ren Liudong (3179)
Multiple High-Grade Metamorphic Events of the Jiaobei Terrane, North China Craton: New Evidences from Zircon U-Pb Ages and Trace Elements Compositions of Garnet Amphibole and Granitic Leucosomes Liu Pinghua, Tian Zhonghua, Wen Fei, Zhou Wanpeng, Wang Yilong (3196)
Paleoproterozoic Back-Arc Basin Opening and Closure: Evidence from the Structural Research of the Volcanic-Sedimentary Rocks in the Helan Town, Liaodong Peninsula Tian Zhonghua, Xu Wang, Liu Lishuang, Ji Lei (3217)
Metamorphic Mafic Dykes from Tianzhen-Huai'an Area: Transformation Criteria of the Late Paleoproterozoic Collision to Extension in the North China Craton Zhang Jiahui, Wang Huichu, Guo Jinghui, Tian Hui, Ren Yunwei, Chang Qingsong, Shi Jianrong, Xiang Zhenqun (3239)
Zircon U-Pb Chronology and Petrogenesis of Two Types of Remelting Granite in Jining Area Chang Qingsong, Wang Huichu, Shi Jianrong, Ren Yunwei (3258)
Petrogenesis of Neoarchean Ananba Quartz Diorite Gneiss in Southeastern Margin of Tarim: Implications for Crustal Evolution Gu Pingyang, Ji Wenhua, Chen Ruiming, Zhuang Yujun, Peng Xuan, Zhu Xianfeng, Guo Yapeng (3268)
Zircon U-Pb Geochronology and Its Geological Significance of the Basic Volcanic Rocks from the Li'eryu Formation, Liaohe Group in Kuandian Area, Liaoning Province Chen Jingsheng, Tian Dexin, Xing Dehe, Li Bin, Liu Miao, Yang Fan, Yang Zhongzhu (3282)
Identification of the ~2.09 Ga and ~1.76 Ga Granitoids in the Northwestern Yangtze Block: Records of the Assembly and Break-Up of Columbia Supercontinent Deng Qi, Wang Zhengjiang, Ren Guangming, Cui Xiaozhuang, Cao Huawen, Ning Kuobu, Ren Fei (3295)
Diagenetic and Metamorphic Timing of the Diebusige Complex, the Eastern Alxa Block: New Evidence from Zircon LA-ICP-MS U-Pb Dating of Biotite-Plagioclase Gneiss Zou Lei, Liu Pinghua, Liu Lishuang, Wang Wei, Tian Zhonghua (3313)
Late Neoarchean-Late Paleoproterozoic Magmatic-Tectonothermal Events in the Xiaojinling Area, Southern Margin of the North China Craton, as Documented by Zircon U-Pb-Hf Isotope Analyses and Whole-Rock Geochemistry Huang Daomao, Dong Chunyan, Wan Yusheng (3330)
Anatomy of a Neoarchean Geological Section in the Lihang Area, Western Shandong: Field Observation and SHRIMP U-Pb Zircon Dating Li Yuan, Ren Peng, Xie Hangqiang, Xie Shiwen, Wang Shijin, Song Zhiyong, Wan Yusheng (3341)
SHRIMP Zircon U-Pb Ages, Geochemistry, Nd-Hf-O Isotopic Compositions of the Huai'an Complex in the Northwest of Hebei Province and Its Geological Significance Hao Guangming, Xie Hangqiang, Liu Yongshun, Dong Chunyan, Ren Peng, Bai Wengqian, Wang Shuqing, Hu Xiaojia, Wan Yusheng (3353)
The Magmatic Activity in Paleoproterozoic Global Magmatic Quiescence: Take the ~2.3 Ga Henglingguan Granites from Zhongtiao Mountains in the Southern North China Craton as an Example Duan Qingsong, Song Huixia, Du Lilin, Ren Liudong, Geng Yuansheng, Wang Jianlong, Huang Zhiqiang, Wang Yanbin, Yang Chonghui (3372)
Studies on Metamorphic Zircons of Granitic Gneisses and Amphibolites in the Dengkou and Shetai Areas of the Khondalite Belt of the North China Craton: More Constraints on Its Northern Boundary Duan Ruihan, Liu Chaohui, Shi Jianrong (3386)
A Case Study of Barrovian Metamorphic Zone of Langzishan Formation of Northern Liaohe Group, Liaodong Peninsula Wen Fei, Tian Zhonghua, Liu Pinghua, Xiang Hua (3403)
(Garnet Bearing) Plagioclase Amphibolite P-T Evolution Path and Its Geological Implications in Rushan Region, Sulu Tectonic Complex: Constraints by Petrology, Mineral Chemistry and Phase Equilibria Modeling Zhu Haozhong, Tian Zhonghua, Wang Zeli, Xiang Hua, Zhang Shukai (3420)
Geochemistry and Geochronology of Mafic Rocks from Hongqiyizzi Group in Chongli Area of the Northern Hebei Province: Implications for the Late Neoarchean-Early Paleoproterozoic Tectonic Evolution of the North China Craton Tao Guanghuo, Li Xiaofeng, Wang Junpeng, Jiang Kang (3436)
The Importance of Space Database Establishment Based on DGSS in Big Data Environment Zhang Guanyu, Fu Junyu, Ou Yang Zhaozhuo, Tian Zhonghua (3451)
Geochemistry and Detrital Zircon U-Pb Ages of Sedimentary Rocks from Neoproterozoic Lengjiaxi Group in NE Hunan Province Yang Xue, Zhang Yushi, Cui Xiang, Yu Pengpeng, Xu Wenjing (3461)
Re-Os Isotopic Dating of Pyrrhotite from Yueawan Cu-Ni Sulfide Deposit in Kalatake Area of East Tianshan Mountain and Its Geological Significance Lü Xiaoqiang, Mao Qigui, Guo Naxin, Li Yuechen, Sun Yan (3475)
Characteristics of Quartz Overgrowth in Sandstones from Es3 Interval Central Anticlinal Belt in Dongying Depression and Its Significance Zhao Wen, He Sheng, Guo Xiaowen, Wang Yongshi, Hao Xuefeng, Xiong Wei (3487)
Well Bore Stability Technology Using Blocking Drilling Fluid System Suitable for the Deep High Temperature Cracked Strata in Well Songke-2 Wu Xiaoming, Zheng Wenlong, Zou Yulian (3502)