

姜正龙, 彭玉鲸, 张为民, 梁爽, 曹元婷. 2014. 吉林辽源西保安群花岗质糜棱岩SHRIMP U-Pb定年. 岩石学报, 30(6): 1748-1756

吉林辽源西保安群花岗质糜棱岩SHRIMP U-Pb定年

作者	单位
姜正龙	中国地质大学海洋学院, 北京 100083
彭玉鲸	吉林省区域地质矿产调查所, 长春 130012
张为民	中国石油勘探开发研究院, 北京 100083
梁爽	中国石油勘探开发研究院, 北京 100083
曹元婷	中国地质大学海洋学院, 北京 100083

基金项目: 本文受全国油气资源战略选区调查与评价专项(2009GYXQ02-06)和国家自然科学基金项目(41130422)联合资助。

摘要:

吉林辽源西保安群是大面积花岗岩侵入体中的残留的构造岩片, 传统认为属于华力西晚期或中侏罗世花岗闪长岩-二长花岗岩系。本文通过对接触界线附近花岗质糜棱岩样品采集和锆石SHRIMP U-Pb定年, 获得多组锆石年龄值为 $236\sim 231\text{Ma}$ 、 $267.6\sim 358.6\text{Ma}$ 、 $416.3\pm 6.8\text{Ma}$ 、 $956\pm 16\text{Ma}$ 。认为该区花岗岩的侵入期次相当复杂, 发育有早中三叠世岩体和发生了中、晚华力西期岩浆活动, 西拉木伦河碰撞带可以东延至此, 残留锆石的年龄与加里东期和Rodinia期拼合的构造岩浆活动相对应。

英文摘要:

Xibaoan Group in Jilin Province is a series of the tectonic slices residued in the granite intrusions, which is traditionally considered to be Late Variscan or Middle Jurassic granodiorite-monzonitic granite. In this study, samples of the granitic mylonite were collected along the contact line of Xibaoan Group in Dongfeng County Jilin Province, and the zircons were dated using the U-Pb method. The results indicate several zircon ages: $236\sim 231\text{Ma}$, $267.6\sim 358.6\text{Ma}$, $416.3\pm 6.8\text{Ma}$, and $956\pm 16\text{Ma}$. Based on the regional geology, we arrived at the following conclusions: (1) The intrusive monzonitic granite of the Xibaoan Group in the contact zone experienced ductile shear deformation and formed in the Early-Middle Triassic. This event was an important part of the eastern extension of the collision belt of the Xar Moron River. (2) The zircon U-Pb SHRIMP age dates indicate that there were multiple periods of emplacement and multiple periods of development of residual magmatic zircons. The tectonic evolution of the Xibaoan Group was complex. (3) The U-Pb SHRIMP age dating of the residual zircons suggest that the magmatic activity occurred during the Caledonian and during the flattening of the Rodinia supercontinent.

关键词: [花岗质糜棱岩](#) [锆石U-Pb年龄](#) [西保安群](#) [吉林辽源](#)

投稿时间: 2012-10-09 最后修改时间: 2014-01-09

[HTML](#) [查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

黔ICP备07002071号-2

主办单位: 中国矿物岩石地球化学学会

单位地址: 北京9825信箱/北京朝阳区北土城西路19号

本系统由北京勤云科技发展有限公司设计

[linezing.com](#)

手机扫一扫

