

北祁连山西段柳沟峡花岗质片麻岩锆石U-Pb法测年研究

郭力宇¹ 甘枝茂² 李惠民³

(1. 福建师范大学地理科学学院, 福建 福州 350007

2. 陕西师范大学旅游与环境学院, 陕西 西安 710062;

3. 天津地质矿产研究所, 天津 300170)

摘要: 柳沟峡花岗质片麻岩是在鱼儿红幅1:5万区调过程中从北大河岩群变质杂体中解体出的古花岗质侵入体。通过对其进行单矿物锆石U-Pb法年龄测定, 获得了(1463±74)Ma和(623±138)Ma两组年龄值。结合区调成果认为1463±74)Ma代表古花岗质侵入体上侵就位时代, (623±138)Ma代表后期叠加的变形变质热事件时代。两组年龄的获得为北祁连山早期大陆裂解及碰撞造山作用的确定提供了直接证据。

关键词: 锆石; 柳沟峡花岗质片麻岩; U-Pb法定年; 北祁连山西段

中图分类号: P597 文献标识码: A

文章编号: 1000-3657(2002)02-0126-03

Single zircon U Pb dating of the Liugouxia granitic gneiss in the western segment of the North Qilian Mountains

GUO Li-yu, GAN Zhi-mao, LI Hui-min

(1. College of Tourism and Environment Science, Fujian Normal University, Fuzhou 350007 Fujian China 2. College of Tourism and Environment Science, Shaanxi Normal University, Xi'an 710062, Shaanxi, China;

3. Tianjin Institute of Geology and Mineral Resources, Tianjin 300170, China)

Abstract: The Liugouxia granitic gneiss is an old granitic intrusion divorced from the metamorphic complex of the Beidahe Group-complex found during 1:50000 regional survey of the Yu'erhong Sheet. Single-zircon U Pb dating yielded ages of 1463±74Ma and 623±138Ma. The two ages coupled with the results of regional survey suggest that the former age represents the age of emplacement of the old granitic intrusion, while the latter the age of the deformational-metamorphic thermal event overprinted in the late stage. The two ages furnish direct evidence for the determination of the continental break-up and collisional orogeny in the early stage in the North Qilian Mountains.

Key words: zircon; Liugouxia granitic gneiss; U Pb dating; western segment of the North Qilian Mountains