

## 庐山筲箕洼组与星子岩群年代地层关系及SHRIMP锆石U-Pb年龄的制约

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中文摘要:本文报道在庐山筲箕洼组中获得细碧岩SHRIMP锆石U-Pb年龄( $840 \pm 6$ ) Ma, MSWD=1.3, 流纹岩锆石U-Pb年龄( $833 \pm 4$ ) Ma, MSWD=1.4, 和流纹岩锆石U-Pb年龄( $831 \pm 3$ ) Ma, 对应的MSWD=1.47。而在星子群流纹岩中获得 $206\text{Pb}/238\text{U}$ 年龄为( $825 \pm 5$ ) Ma, 对应的MSWD=0.46。笔者依据上述精确锆石年龄,首次提出将筲箕洼组明确定位于星子岩群之下。本文结合“江南造山带”锆石U-Pb年龄:东部变质基底的双桥山群,西部变质基底梵净山群和似盖层下江群以及中部变质基底冷家溪群和似盖层板溪群的锆石SHRIMP U-Pb年龄,将筲箕洼组定位于“武陵运动”之下的新元古代地层。依据星子岩群年龄数据,首次将星子岩群明确定位于筲箕洼组之上与双桥山群为同期的深变质岩。该年龄对限定区域地层对比和构造演化都有着重要意义。上述锆石U-Pb年龄标示了赣西北地区同样存在820 Ma界面上下的新元古代地层,为江南古陆变质地层的对比提供了新的年代学数据。

中文关键词:筲箕洼组 星子岩群 锆石SHRIMP定年 “江南造山带” 赣西北地区

## The Geochronological Relationship between the Shaojiwa Formation and the Xingzi Complex Group in Northwestern Jiangxi and the Constraints on Zircon SHRIMP U-Pb Age

**Abstract:** Ages of ( $840 \pm 6$ ) Ma (MSWD=1.3), ( $833 \pm 4$ ) Ma (MSWD=1.4) and ( $831 \pm 3$ ) Ma (MSWD=1.47) were obtained for spilite and rhyolite from the Shaojiwa Formation. The Xingzi Complex Group has the age of  $206\text{Pb}/238\text{U}$  ( $825 \pm 5$ ) Ma (MSWD=0.46). In combination of the SHRIMP U-Pb dating of the spilite and rhyolite of the Shaojiwa Formation in the Jiangnan orogen, the authors have determined for the first time that the Xingzi Complex Group is of Neoproterozoic period and lies below the Shaojiwa Formation. These isotopic data from the Shaojiwa Formation are very important for regional correlation of the strata of the corresponding period and tectonic evolution. The zircon U-Pb ages mentioned above determine that Neoproterozoic strata around the age of 820 Ma are developed in northwestern Jiangxi Province. These data contribute to the stratigraphic subdivision and correlation of the metamorphosed rocks in whole Jiangnan old land and help geologists investigate the geological background and ore-forming conditions of the Jiangnan Orogen.

**keywords:** [Shaojiwa Formation](#) [Xingzi Complex Group](#) [zircon SHRIMP dating](#) [Jiangnan orogen](#) [northeastern Jiangxi](#)

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