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冈底斯带门巴花岗岩同位素测年及其对新特提斯洋俯冲时代的约束 [点此下载全文](#)

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摘要:

本文应用单颗粒锆石SHRIMP U—Pb法和角闪石 $^{40}\text{Ar}/^{39}\text{Ar}$ 法, 对出露在冈底斯构造带上的门巴花岗岩体进行了同位素测年, 时代分别为207Ma和215Ma, 表明它们形成于晚印支期。地质与地球化学研究显示该时期形成的岩体主要为黑云角闪花岗岩和黑云母二长花岗岩, 它们形成于岛弧环境, 与其南侧墨竹工卡一带出露的晚三叠世钙碱性火山岩(叶巴组)共同构成与板块俯冲有关的特征性岩石组合, 揭示新特提斯洋的俯冲时代应早于晚三叠世。

关键词: [SHRIMP锆石U-Pb年龄](#)  [\$^{40}\text{Ar}/^{39}\text{Ar}\$ 年龄](#) [门巴花岗岩](#) [新特提斯洋](#) [冈底斯](#)

Isotopic Dating of the Mamba Granitoid in the Gangdise Tectonic Belt and Its Constraint on the Subduction Time of the Neotethys [Download Fulltext](#)

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Abstract:

The paper presents SHRIMP U-Pb dating results of zircon and  $^{40}\text{Ar}/^{39}\text{Ar}$  dating results of hornblende from the Mamba granitoid cropping out in the Gangdise tectonic belt. The ages were dated to be 207 Ma and 215 Ma respectively, suggesting that they were formed during the late Triassic. Geological and geochemical studies show that the Mamba Granitoids include biotite hornblende granodiorite and biotite adamellite, which were formed in an island-arc environment. Mamba granitoid and the late Triassic calc-alkaline volcanics (the Yeba Formation) cropping out near Maizhokunggar to the south of Mamba constitute a typical rock association related to plate subduction, which suggests that the Neotethys subducted before the late Triassic.

Keywords: [SHRIMP dating](#)  [\$^{40}\text{Ar}/^{39}\text{Ar}\$  dating](#) [Mamba granitoids](#) [Neotethys](#) [Gangdise](#)

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