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摘要 : 云南省金平县八一村钾质碱性花岗岩中的锆石由岩浆锆石和岩浆复合型锆石(老核新壳锆石)组成,以后者居多。锆石定年结果表明,岩浆锆石和岩浆复合型锆石的新壳 SHRIMP U — Pb 年龄为 37Ma,反映岩浆上侵定位时的结晶时间,相当于始新世晚期。锆石老核获得的最大年龄为 510Ma 和 177Ma,相当于晚寒武世和中侏罗世,表明该岩体保存有寒武纪和侏罗纪地质事件信息,而 42 ~ 48Ma 年龄可能是混合年龄。最后对锆石的成因和花岗岩的成岩机制等进行了初步探讨。

关键词 : SHRIMP 年龄; 锆石; 钾质碱性花岗岩; 八一村; 金平县; 云南省

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Lin Q C, Xia B, Zhang Y Q, Wang Y B. Zircon SHRIMP dating of the Bayicun potassic alkali — granite, Jinping, Yunnan, in the southern segment of the Ailaoshan — Jinshajiang alkaline rock belt. Geological Bulletin of China, 2005, 24 (5) : 420 — 423

Abstract : Zircons in the Bayicun potassic alkali — granite at Jinping County, Yunnan, are composed of magmatic zircon and magmatic compound zircon (zircon with an older core and a younger shell), with the latter predominating. The SHRIMP U — Pb age of the magmatic zircon and younger shell of the magmatic compound zircon is 37 Ma, which indicates the age of magmatic crystallization during the emplacement of the magma, equivalent to the late Eocene. The oldest ages for the older core of the zircons are 510 Ma and 177 Ma, equivalent to the Late Cambrian and Middle Jurassic respectively, suggesting that the granite body contains the information of the Cambrian and Jurassic geological event. The ages of 42 to 48 Ma may be mixing ages. Finally the origin of zircons and rock — controlling mechanism are discussed.

Key words : SHRIMP U — Pb age ; zircon ; potassic alkali — granite ; Bayicun ; Jinping County ; Yunnan Province