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滇西北格咱火山-岩浆弧斑岩成矿作用

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摘要:

处于义敦岛弧南端的格咱火山-岩浆弧,印支期以大规模中酸性火山-岩浆岩呈北西向带状展布为特征,本文根据火山-岩浆岩的分布、类型、时代与构造环境、成矿作用等,将该岩浆岩带细分为西部烂泥塘-春都斑岩成矿带和东部亚杂-普朗斑岩成矿带,并阐述了西斑岩带岩浆侵位时间较东斑岩带早15~25Myr以及2个成矿带不同的成矿特征,提出该区燕山晚期叠加了1期广泛的钼(钨、铜)成矿作用,以S型花岗岩侵位,南北向叠加于印支期岛弧岩浆岩带上,由北而南从出露至半隐伏、隐伏状,在云南境内圈出休瓦促、热林、红山、铜厂沟等多个花岗(斑)岩体,蚀变花岗(斑)岩内发育石英脉型和蚀变岩型钼矿化,围岩中以热液脉型沿断裂带、不同岩性界面等成矿。以往研究,休瓦促、热林成岩年龄分别为 $84.4 \pm 1.1\text{Ma}$ 和 $81.7 \pm 1.1\text{Ma}$,成矿年龄分别为 $83 \pm 1\text{Ma}$ 和 $81.2 \pm 2.3\text{Ma}$ 。(李建康等,2007;尹光侯等,2009);本次在红山铜矿深部隐伏岩体中获辉钼矿Re-Os等时线年龄80.2Ma。研究认为,燕山期岩体成矿,仍然表现出岩体由内向外(由深到浅)形成斑岩型钼(铜)矿→接触带夕卡岩型钼(铜)矿→外围角闪岩钼(铜)矿、热液脉状铜铅锌矿等成矿系列,据此进行缺位预测,为下步找矿指出了方向。

英文摘要:

The Geza volcanic magmatic arc in the south end part of Yidun island arc is characterized by Indosinian large scale intermediate-acid volcanic magmatic rock in NW zonal distribution. In this paper, we divide this magmatic rock zone into the west Lannitang-Chundu porphyry metallogenesis zone and the east Yaza-Pulang porphyry metallogenesis zone according to the distribution, type, age, structural environment and metallogenesis, etc., of the volcanic magmatic rock and indicate the emplacement time of west porphyry zone is 15~25Myr earlier than that of the east porphyry zone and the different metallogenesis characteristics of them. We propose that there is a Yanshanian superimposition of wide Mo (W, Cu) metallogenesis, i.e., NS superimposition of S-type granite emplacement on the Indosinian island arc magmatic rock zone, outcropped or semi-buried, buried from N to S. Xiuwacu, Relin, Hongshan, Tongchanggou, etc., many granite (porphyry) rock bodies have been outlined in Yunnan. The quartz veined type and altered rock type Mo metallogenesis is developed in the altered granite (porphyry), whereas the hydrothermal veined type metallogenesis is along the fault zone and boundary surface between different rock in the wall rock. According to the previous study, the diagenesis ages of Xiuwacu and Relin are separately $84.4 \pm 1.1\text{Ma}$, $81.7 \pm 1.1\text{Ma}$; metallogenesis ages separately $83 \pm 1\text{Ma}$, $81.2 \pm 2.3\text{Ma}$ (after Li *et al.*, 2007 and Yin *et al.*, 2009). In our study, the molybdenite Re-Os isochron dating of deep buried rock body of Hongshan Cu orefield is 80.2Ma. We think that the metallogenesis of Yanshanian rock body still shows the metallogenesis series of porphyry type Mo (Cu) deposit→contact skarn type Mo (Cu) deposit→outer surrounding hornfels Mo (Cu) deposit, hydrothermal veined Cu-Pb-Zn deposit, etc from inner to outer (from deep to shallow) of rock body. Therefore, we can carry out the vacancy prognosis based upon this metallogenesis series and guide the ore prospecting in the future.

关键词: [格咱弧](#) [印支期](#) [燕山期](#) [斑岩](#) [成矿作用](#)

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