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赣东北地区岩浆岩同位素年代学研究及地质演化 [点此下载全文](#)

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DOI:

摘要:

本文收集并整理赣东北及邻区岩浆岩年龄数据200多个, 在综合、分析大量地质资料与前人成果的基础上, 尝试较全面地总结本区中元古代以来的岩浆活动、构造演化过程及其动力学背景. 研究表明, 本区古元古代及更早时期的岩浆活动确切记录很少, 反映出赣东北地区可能没有古老的陆壳. 中—新元古代丰富多彩的岩浆活动, 记录了江南造山带在扬子板块东南缘的发生和形成过程. 本区古生代的构造—岩浆活动总体来说不强, 主要发育在一些海西印—支期的断裂拗陷带, 并且伴随与海底火山活动—热水沉积相关的成矿作用. 中生代尤其燕山期是赣东北地区岩浆活动较强烈的一个时期, 以德兴铜厂—富家坞花岗闪长斑岩和银山潜火山岩为代表的花岗质岩浆活动形成了规模巨大的铜金多金属矿床, 是中国东部中生代成矿大爆发的典型代表; 本区在白垩纪处于拉张伸展的构造环境, 发育双峰式岩浆岩建造. 新生代构造—岩浆活动不强, 仅在一些张裂带有少量岩浆活动. 本文还结合近期工作, 对一些争议性问题提出了自己的认识.

关键词: [同位素年龄](#) [岩浆活动](#) [构造演化](#) [赣东北](#)

Isotope Geochronological Study of Igneous Rocks in Northeastern Jiangxi Province and Its Implication to Geologic Evolution [Download Fulltext](#)

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Abstract:

This paper collected more than 200 isotopic age data of igneous rocks in Northeast Jiangxi Province and vicinity areas, made synthetic analyses from many geologic data of previous studies, and summarized in detail the process of magmatism, tectonic evolution and geodynamic background of this area from middle Proterozoic to Cenozoic. No precise datum related to magmatism of Early Proterozoic or earlier ages is found, which might reveal the lack of old continent crust in this area. The abundance of various types of igneous rocks with Meso- to Neoproterozoic ages provided important evidence for the forming and developing of Jiangnan Orogeny Belt in the southeastern margin of Yangtze Plate. The tectonic--magmatic activity in Paleozoic Era was generally not intensive, and only developed in several Hercynian--Indosinian fault depression zones, where marine volcanism and related hydrothermal activities took place and caused some Sedex type mineralizations. The Mesozoic Era, especially the Yanshanian period, was the most intensive stage of magmatic activities in Northeast Jiangxi Province. It was also an important time for the formation of large-scale Cu--Au and poly-metallic deposits in this area, such as the super-large Tongchang--Fujiauw porphyry copper deposit related with early Yanshanian granodiorite porphyry, and the Yinshan polymetallic deposit related with sub-volcanic rocks. They are representative samples of Mesozoic metallogenic explosion in East China. In Cretaceous, the Northeast Jiangxi area was in an extensional tectonic environment, resulted in the development of some bimodal igneous rock suites. Up to Cenozoic, the tectonic--magmatic activities became extensional zones. Some ideas concerning to several paper based on our recent study. weaker, only a few igneous rocks existed in some controversial questions are also put forward in this paper based on our recent study.

Keywords: [isotopic age](#) [magmatic activity](#) [tectonic evolution](#) [Northeast Jiangxi Province](#)

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