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嵩县祁雨沟金矿成矿时代的 $40\text{Ar}-39\text{Ar}$ 年代学证据 [点此下载全文](#)

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摘要:

采用单矿物 $40\text{Ar}-39\text{Ar}$ 年代学方法,对河南祁雨沟爆破角砾岩型金矿的矿化蚀变矿物进行了高精度的定年研究。矿脉中钾长石的 $40\text{Ar}-39\text{Ar}$ 年龄表明,祁雨沟金矿的主要成矿阶段发生在115~125Ma期间,成矿作用持续达10Ma。结合前人研究成果分析,区域燕山期花岗岩侵位30Ma之后祁雨沟金矿开始进入主成矿期,此时正是区域伸展构造的发育时期,深部流体活动频繁而强烈。祁雨沟金矿是中国东部金的大规模成矿作用的组成部分。

关键词: [40Ar-39Ar年代学](#) [成矿时代](#) [祁雨沟金矿](#)

$40\text{Ar}-39\text{Ar}$  Dating and Geochronological Constraints on the Ore-forming Epoch of the Qiyugou Gold Deposit in Songxian County, Henan Province [Download Fulltext](#)

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Abstract:

This paper presents a  $40\text{Ar}-39\text{Ar}$  chronological study of the Qiyugou gold deposit, an explosion-breccia type deposit in the Xiong'ershan area, Songxian County, Henan Province. The  $40\text{Ar}-39\text{Ar}$  ages of K-feldspar formed in the ore veins show that the main metallogenic stage occurred during 115~125 Ma, and the gold mineralization lasted 10 Ma. Combined with the studies by other researchers, the authors suggest that it took about 30 Ma from the formation of regional granite to the development of the explosion-breccia and the beginning of the main metallogenic epoch. The Qiyugou gold deposit got into form at the same time as the development of the regional extensional tectonics, when the activity of deep fluids became intensive and frequent. The deposit is a component part of the large-scale gold mineralization in late Mesozoic in eastern China.

Keywords: [40Ar-39Ar dating](#) [metallagenic epoch](#) [Qiyugou gold deposit](#)

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