

THE EVIDENCE OF HYDROGEN AND OXYGEN ISOTOPE FOR GENETIC TYPE OF KAOLINE DEPOSITS

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Abstract

This paper discusses significance of stable hydrogen and oxygen isotopic geochemical sign for type of kaoline deposits origin. Based on data of hydrogen and oxygen isotope, kaoline deposits in coastal Zhejiang and Fujian, China, can mainly be classified into two types of hydrothermal alteration and weathering. Meteoric water is main component in the ore-forming fluids.

Key words Kaoline deposit, hydrogen and oxygen isotope, genetic type.

山东找到一新类型大型金矿

山东平邑县归来庄金矿位于昆山隆起 NE 边缘, 燕甘断裂东侧次一级 EW 向构造带中。

区内岩浆活动频繁, 形成了中生代的铜石杂岩体, 其岩体演化有两大周期: (1) 闪长玢岩、二长闪长玢岩、二长斑岩、正长斑岩; (2) 石英二长闪长玢岩、石英二长 (斑) 岩、正长斑岩 (或霞石正长斑岩)。矿床即赋于超浅成的中偏碱性杂岩体边缘沿断裂构造侵位的脉状隐爆角砾岩中。

隐爆角砾岩呈串珠状出现, 总长达 2km, 其中赋矿 1km, 宽 20m $\pm$, 延深 500m。隐爆角砾岩体由石英二长闪长玢岩、石英二长斑岩、正长斑岩成分的岩石组成。矿化即沿部分隐爆角砾岩及其围岩 (震碎角砾岩或断层角砾岩) 而生成。

这种沿脉状的碱性隐爆角砾岩形成金矿的实例在国内尚属首次。

(季绍新)