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摘要:

北大别4个麻粒岩和4个TTG片麻岩样品的Sr, Nd同位素分析结果表明, 样品普遍具有较高的锶同位素比值, 较低的Nd同位素比值 ($^{143}\text{Nd}/^{144}\text{Nd}=0.5108-0.5124$), 表现出明显的壳源特征, 结合铅同位素的组成来看, 北大别麻粒岩和TTG片麻岩的Sr-Nd-Pb同位素特征可能暗示源区有古老地壳物质的混入。

关键词: [麻粒岩](#) [TTG片麻岩](#) [大别山](#) [锶](#) [钕](#) [铅同位素](#) [地球化学](#)

Sr, Nd and Pb Isotope Geochemistry of Granulites and TTG Gneisses from the North Dabie Orogen

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Abstract:

Sr, Nd and Pb isotope analysis of four granulite samples and four gneiss samples from the northern Dabie Orogen was carried out. All the samples have relatively high Sr isotope ratios ($^{87}\text{Sr}/^{86}\text{Sr}=0.706-0.746$) and low Nd isotope ratios ($^{143}\text{Nd}/^{144}\text{Nd}=0.5108-0.5124$). These results together with Pb isotopic compositions suggest that the Sr-Nd-Pb isotopic compositions of granulites and TTG gneisses of the northern Dabie Orogen are equal to those of the northern margin of the South China Craton. The Sr-Nd-Pb isotopic characteristics of some samples show that these rocks are very old, c. 2-3Ga. The Sr-Nd-Pb isotopic characteristics of some samples are similar to those of younger crustal materials in their sources.

Keywords:[Sr](#) [Nd](#) [Pb](#) [isotope](#) [granulite](#) [TTG](#) [gneiss](#) [the North Dabie orogen](#)

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