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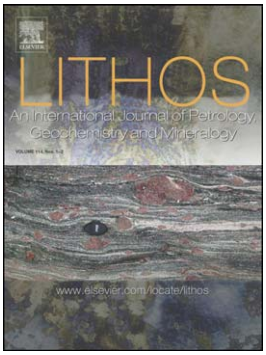

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Geochemistry and isotopic signatures of Paleogene plutonic and detrital rocks of the Northern Andes of Colombia: A record of post-collisional arc magmatism

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ABSTRACT

Between the Late Cretaceous and Paleogene, the Northern Andes experienced subduction and collision due to the convergence between the oceanic Caribbean Plate and the continental margin of Ecuador and Colombia. Subduction-related calc-alkaline plutonic rocks form stocks of limited areal expression or local batholiths that consist mostly of diorites and granodiorites. We investigated two stocks (Hatillo and Bosque) exposed in the Central Cordillera of Colombia that had U-Pb zircon crystallization ages between 60 and 53 Ma. Relatively low radiogenic Sr, Nd and Pb isotopes from selected samples account for a heterogeneous crustal source, whereas negative anomalies of Nb and Ti, high LREE/HREE

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