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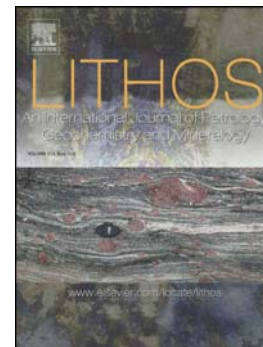
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## Petrogenesis of Late Cenozoic basaltic rocks from southern Vietnam

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### ABSTRACT

Major and trace element concentrations, and Sr-Nd-Hf-Pb isotopic compositions of Late Cenozoic (4.1 to 13.8 Ma) basaltic rocks from southern Vietnam have been determined to understand the nature of their mantle source. The volcanic rocks are composed of tholeiite basalt, alkaline basanite, trachybasalt, basaltic trachyandesite, and trachyandesite. The alkaline rocks show light rare earth element (LREE) enrichment, with  $(La/Yb)_N = 10.3-29.8$ . The tholeiite basalts are distinguished by much lower values (8.8-9.5) of  $(La/Yb)_N$ . On a primitive mantle-normalized trace element distribution diagram, they show oceanic island basalt (OIB)-like large-ion lithophile element enrichment without high field strength element depletion. However, some samples exhibit positive anomalies in K and Pb and negative

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