

The petrology and geochemistry of calc-alkaline andesites on Shodo-Shima Island

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Petrographical and geochemical characteristics of calc-alkaline andesites on Shodo-Shima Island, SW Japan, having bulk compositions largely identical to the continental crust, are presented. The petrographic observations suggest a role for magma mixing in producing such andesite magmas. Contributions from the at least five endmember magmas to the calc-alkaline andesite genesis can also provide a reasonable explanation of the Pb-Sr-Nd isotope compositions of such andesites.

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