

The REE- and HFSE-bearing phases in the Itatiaia alkaline complex (Brazil) and geochemical evolution of feldspar-rich felsic melts

Leone Melluso, Vincenza Guarino, Michele Lustrino, Vincenzo Morra and Roberto De' Gennaro

Supplementary Tables 1 to 12. All mineral compositions reported in the text.

Supplementary files:

Suppl. Fig. 1: Differentiation Index (D.I.) vs. Peralkaline Index (P.I) diagram for the Itatiaia rocks. The data of syenites and phonolites of Morro Redondo, Passa Quatro, Poços de Caldas and Morro de Sao João are taken from Brotzu *et al.* (1989, 1992, 2007) and Lustrino *et al.* (2003). Symbols: quartz-syenites and granites=red; nepheline syenites=blue.

Suppl. Fig. 2: Classification of a) feldspar and b) c) d) pyroxene of the Itatiaia rocks. Symbols: quartz-syenites and granites=red; nepheline syenites=blue; corundum-bearing syenites=green.

Suppl. Fig. 3: Amphibole compositions in selected binary diagrams, after Giret *et al.* (1980) and Leake *et al.* (1997). Symbols: quartz-syenites and granites=red; nepheline syenites=blue.

Suppl. Fig. 4: Chevkinite-perrierite compositions in selected binary diagrams.

Suppl. Fig. 5: Binary diagrams with the composition of the Itatiaia F-disilicates. The marianoite composition (black triangle) is taken from Chakhmouradian *et al.* (2008).

Suppl. Fig. 6: Composition of the carbonates in the Ca-Mn-Fe diagram.

Suppl. Fig. 7: Element variation diagrams in the Itatiaia rocks. Symbols: quartz-syenites and granites=red; nepheline syenites=blue. The composition of the mafic rocks is reported in yellow.

Suppl. Fig. 8: Primitive mantle-normalized diagrams for a) mafic rocks of the Serra do Mar province and b) the Itatiaia rocks of this study. The normalization values are those of Lyubetskaya and Korenaga (2007).