Importance of quartz-bearing felsic vein in peridotie xenolith from Tallante, SE Spain

Yohei Shimizu[1], Shoji Arai[2], Fernando Gervilla[3]

[1] Dept. Earth Sci., Kanazawa Univ, [2] Dept. Earch Sci., Kanazawa Univ., [3] Tierra, Granada Univ

Quartz-bearing orthopyroxene-plaioclase veins were found in spinel peridotite xenoliths in alkali basalts from Tallante, Southeast Spain. The felsic vein is composed mainly of orthopyroxene and plagioclase, and subordinately of quartz, apatite, rutile, zircon and glass. The modal quartz has been preserved by orthopyroxene lining along the olivine-rich paridotite wall. The presense of quartz in the vein directly demonstrates an activity of SiO2-oversaturated melt in the upper mantle of the Betic area. The felsic melt may have been derived from a SiO2-oversaturated melt produced by slab melting, amd it cogenetic with the calc-alkaline magmas erupted in miocene.

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