

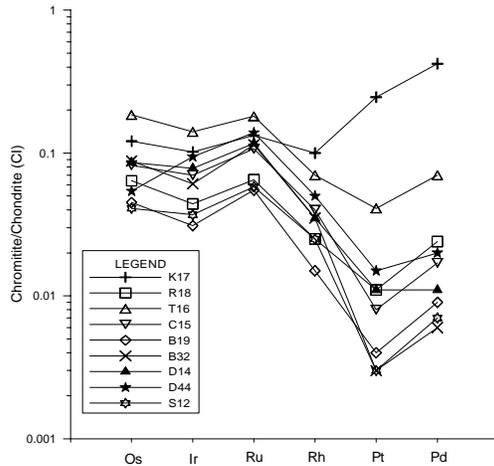
Platinum Group Element contents of the Kop Chromitites and its possible sources, (NE Turkey)

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The average contents of PGE in the chromitites from the Kop ultramafics are Os: 43.6, Ir: 39.5, Ru: 74.4, Rh: 8.7, Pt: 38.6, and Pd: 35.4 ppb. Chondrite-normalized PGE distribution patterns of all chromitites reveal a negative trend from Ir to Pd. The PGEs are sensitive to the degree of partial melting of source regions and the S-saturation status of resultant magma. Chondrite normalized PGE patterns range from nearly unfractionated in the chromitites (Pd/Ir=0.09-4.18) from the Kop ultramafics. Total PGE content of the chromitites range from 93-710 ppb.



The chromite composition and depleted nature of chromitites for Pt, Pd and Rh in the Kop ultramafics can be consistent with the occurrence in setting of supra-subduction zone (SSZ) or back arc basin. However, the enrichment of Pt, Pd and Rh for the some of chromitites may be related to varying degrees of large partial melting of the upper mantle, and to mixing with a more evolved magma for the Kop chromitites with a relatively high Pd/Ir (4.18) ratio and its reflecting of positive correlation in the normalized chondrite diagram.

References

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Crystallization of orbicular rocks from Camlıkaya, NE Turkey

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Orbicular rocks crop out in a 25x100m size body in the granitic rocks at Camlıkaya, NE Turkey. They have dioritic/gabbroic composition. The cores of the orbicules and the matrix between the orbicules have same mineralogical composition which may be crystallized from the orbicule-forming magma. The matrix and the cores of the orbicules are composed of pyroxene, hornblende, magnetite and andesine-labradorite and have poikilitic texture. Mafic cores are surrounded felsic shell composed of mainly plagioclase and perpendicular the core. After initial 'normal' crystallization of the magma, superheating probably triggered by a sudden addition of volatiles destroyed earlier formed nuclei and also affected the already crystallized part of the rock. Addition of felsic components and cooling caused plagioclase nucleation and rapid crystallization.

References

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