

**GEOCHEMISTRY OF SELECTED GARNETS IN PEGMATITES FROM THE
RĂZOARE FORMATION (PRELUCA MOUNTAINS, ROMANIA)**

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Abstract

The Răzoare formation, part of the Preluca Mountains from NW Romania, is the host of granitic pegmatites rich in garnets. The large garnet grains of dark pink colour are associated with quartz, muscovite and albite. Generally, garnet is a common accessory mineral in granitic pegmatites associated with granite, and its composition denotes the nature of the crystallization environment. The investigated garnets display a significant spessartine content (about 30 mol %), which is typical for garnets from magmatic pegmatites. The REE pattern and the Y, Li, Nb/Ta, Zr/Hf and Sc contents support the magmatic origin of the pegmatites investigated. This sum of geochemical features points to the development of the rocks from a peraluminous melt rich in volatile components which are involved in the enhancement of trace element mobility during the differentiation processes.

Keywords: garnet, pegmatites, trace elements, Răzoare formation, Preluca Mountains.

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