

RODINGITE FROM WESTERN YUNNAN PROVINCE, CHINA

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The Jinchan and Laowangzhai ultramafic bodies occur in the Ailaoshan ophiolite zone, midwestern Yunnan, and the Luxi ultramafic body of the Alpine type occurs in western Yunnan. The Laowangzhai body and the Luxi body are located about 50km northwest and about 350km west of Jinchan body, respectively. The ultramafic rocks originally dunite, harzburgite and pyroxenite are mostly altered to serpentinite. Many blocks of rodingite are interspersed in the serpentinitized ultramafic bodies. In the Jinchan body, they occur forming the massive- or vein-type. Massive-type rodingites consist of garnet, chlorite and diopside. Chlorite is relatively small in amounts in core compared to rim. Vein-type rodingites consist of garnet, chlorite and subordinate diopside. Chemical composition of the garnet belongs essentially to grandite-hydrograndite series rich in andradite molecule. The garnet in massive rodingite is also characterized by extremely high titanium contents. In the Laowangzhai body, rodingite occurs as vein-type. The rodingite consists of garnet, chlorite and diopside in margin, and garnet, diopside, chlorite and prehnite in center. The Luxi ultramafic body has several massive-type blocks. In only one of several blocks, the mineral assemblage of rodingite has been identified. The garnets occurring in rodingites from the Laowangzhai and Luxi bodies are grandite-hydrograndite series rich in grossular molecule.

In conclusion, it was recognized a chemical difference of the garnet. Namely, the garnet from the Jinchan body is characterized by grandite-hydrograndite rich in andradite molecule, while the garnets from the Laowangzhai and Luxi ones rich in grossular.