

X-ray diffraction study of vitreous hydrous silica

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Water changes the properties of magma such as viscosity, density, and sound velocity, when it is dissolved into magma. Therefore, it is interested how dissolution of water affects structure of silicate melts. We have studied the hydrous silica glass, which was quenched from 200 MPa and 1500 C, by the X-ray diffraction analysis using synchrotron radiation.

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