

Boron K-Edge X-Ray Absorption and Emission Spectroscopic Studies in Sodium Borate Glasses

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Abstract

B K-edge XANES measurements in the system of $\text{Na}_2\text{O}-\text{B}_2\text{O}_3$ glasses and some borate crystals were performed using synchrotron radiation and the proportion of B^4 was estimated. Glasses with high contents of Na_2O and $\text{Na}_2\text{B}_4\text{O}_7$ crystal were also investigated by the excitation energy-dependent X-ray emission spectroscopy (XES).

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