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Aluminium coordination in tektites: A XANES study

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ABSTRACT

Al K-edge XANES spectra were recorded for six tektites to obtain information on the local structure around Al. Albite, grossular, and andalusite were used as reference materials for Al in fourfold, sixfold, and five+sixfold coordination, respectively. The spectra of the tektites are very similar, except for the intensity of the main absorption edge. Comparison of the spectral features of the tektite glasses with those of the reference materials indicates that Al is tetrahedrally coordinated.