

Fig. 1. Axinite crystal structure. Projection of the $B_2Si_8O_{30}$ group on a -axis (a) and b -axis (b). The boron tetrahedra are shaded. (c) The framework of polyhedra around Al, Fe(Mn) and Ca. Numbers refer to corresponding oxygen notations – Table 2. (d) The hydrogen bond. The projection is approximately along the $[0 \bar{1} 2]$ direction [74T1].

Baotite

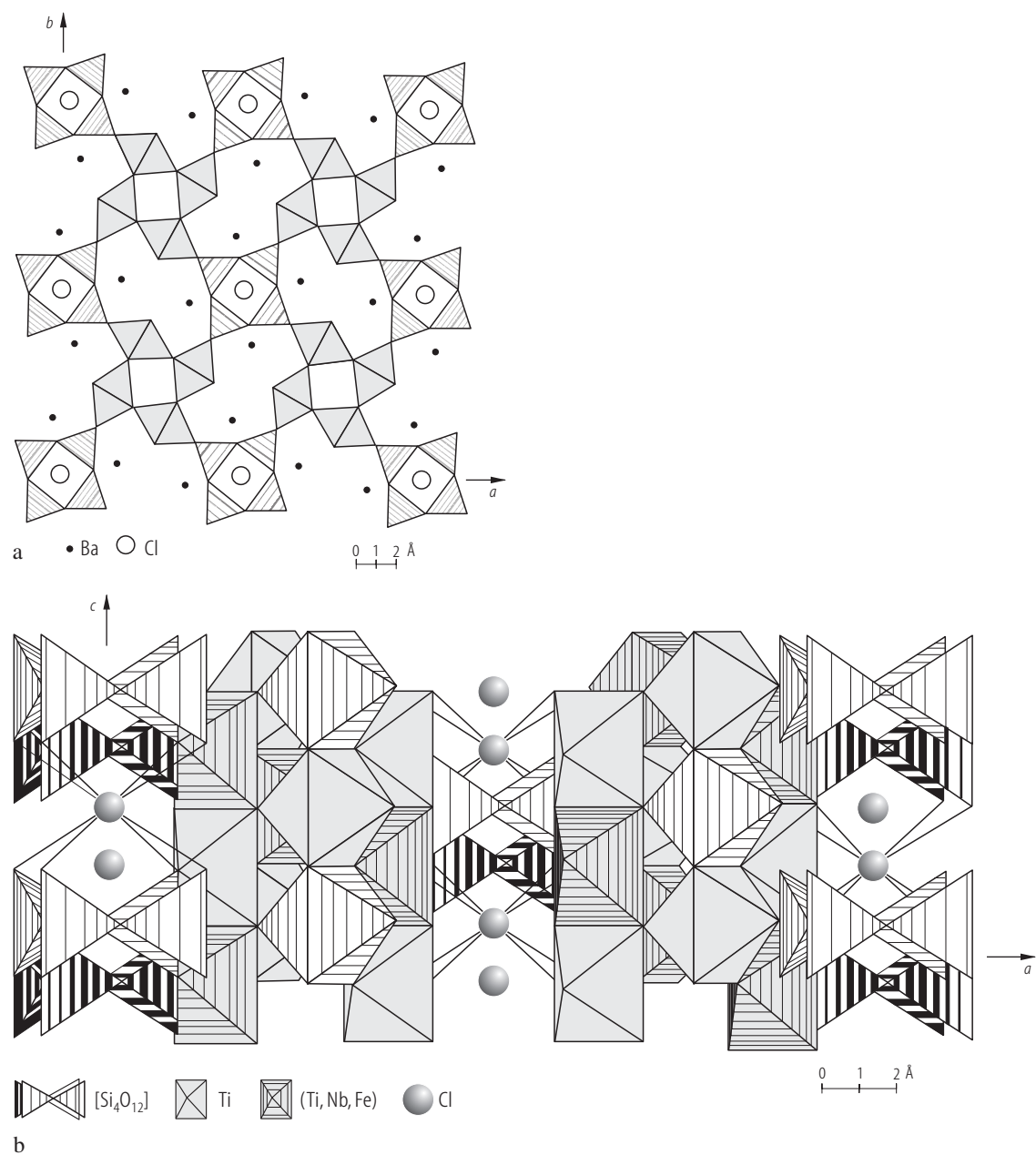


Fig. 2. Baotite. (a) Plane of the structure; (b) projection along the b -axis. Positions of the Ba atoms were not shown [70N1].

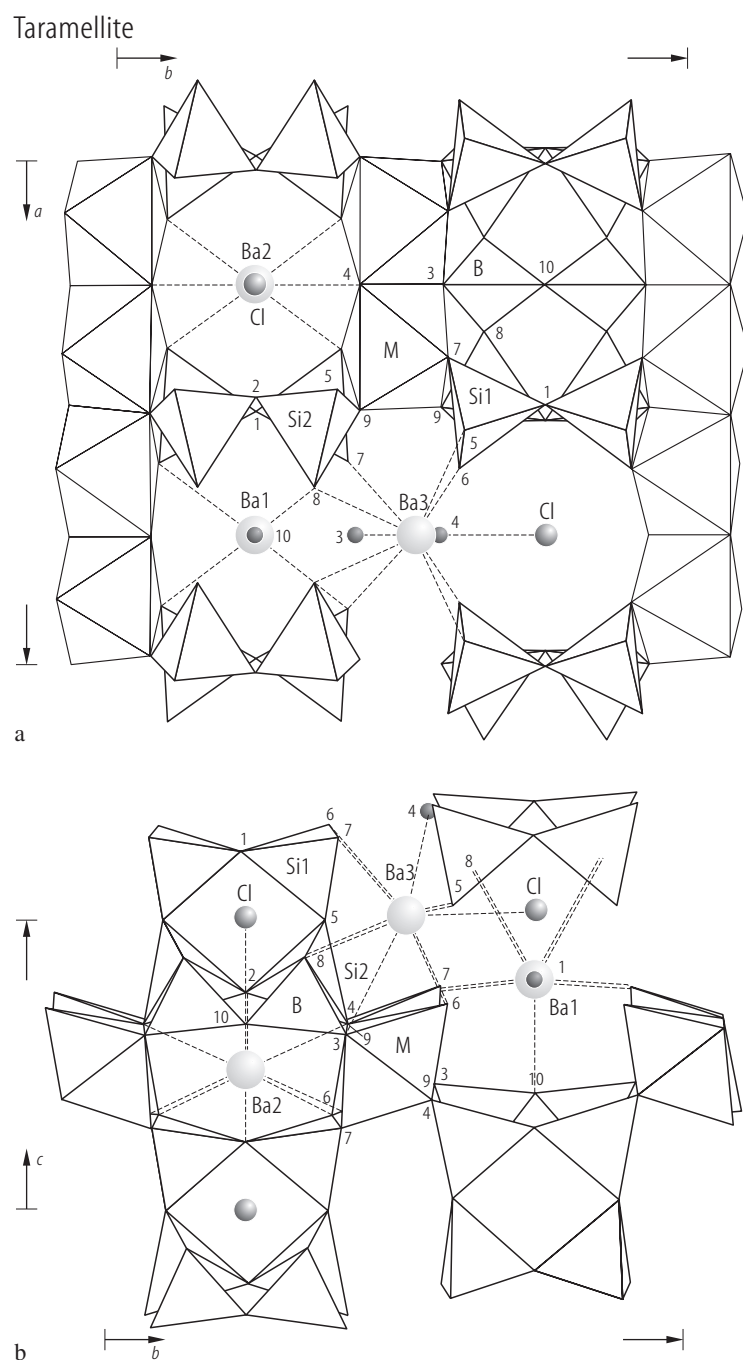


Fig. 3. Taramellite. Projection of the structure. (a) Along [001] and (b) [100]. Some atoms and polyhedra have been omitted for clarity [80M3].

Joaquinite

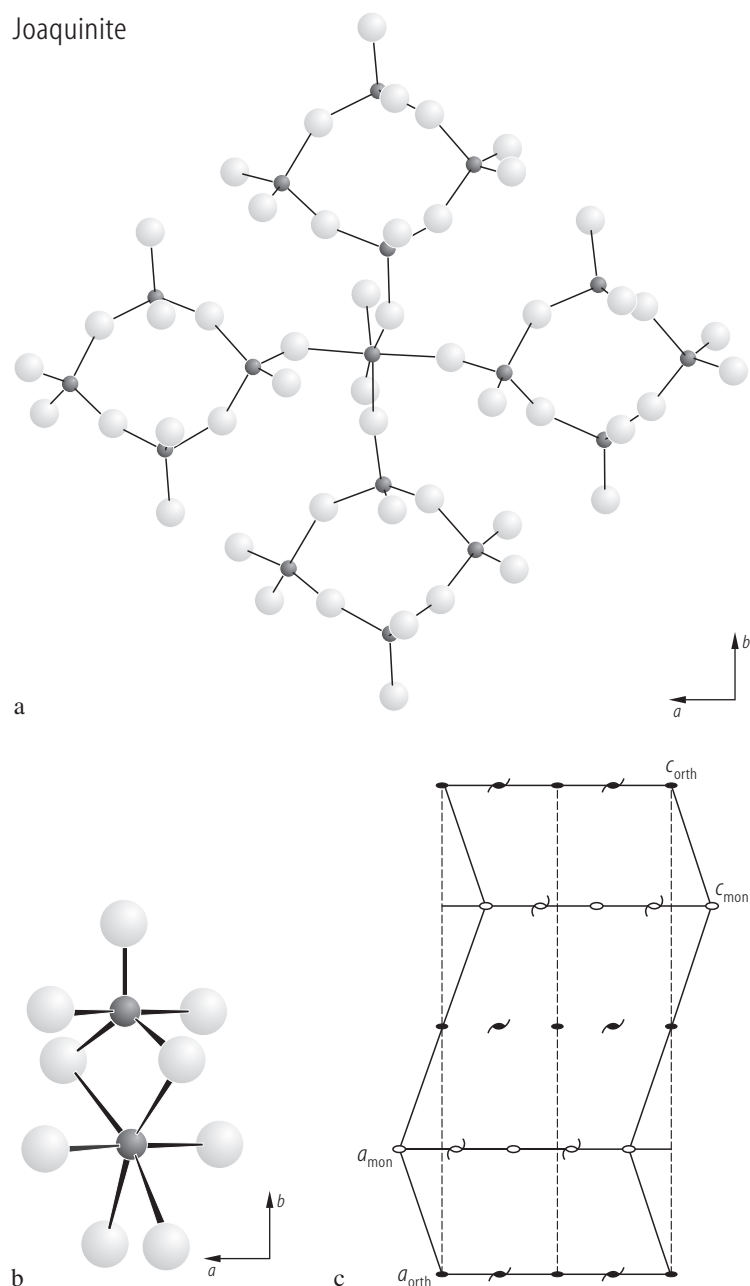


Fig. 4. Joaquinite. **(a)** Perspective view of the sheet structure. Four Si_4O_{12} rings are joined by each TiO_6 octahedron (center) to form continuous sheets parallel to (001). The silicon atoms are almost in the same plane, but titanium is about 1 Å below the plane. **(b)** Perspective view of the Fe and Na coordination. The Fe atom, above, is five-coordinated, with OH at the upper apex. Na is six-coordinated. A two-fold rotation axis runs vertically through the OH, Fe and Na atoms. **(c)** Probable relationship of unit cells in monoclinic versus orthorhombic structure. Hollow symbols are used for those twofold rotation and screw axes which are present in the C2 monoclinic cell but not in the Cc2m orthorhombic cell [75D1].

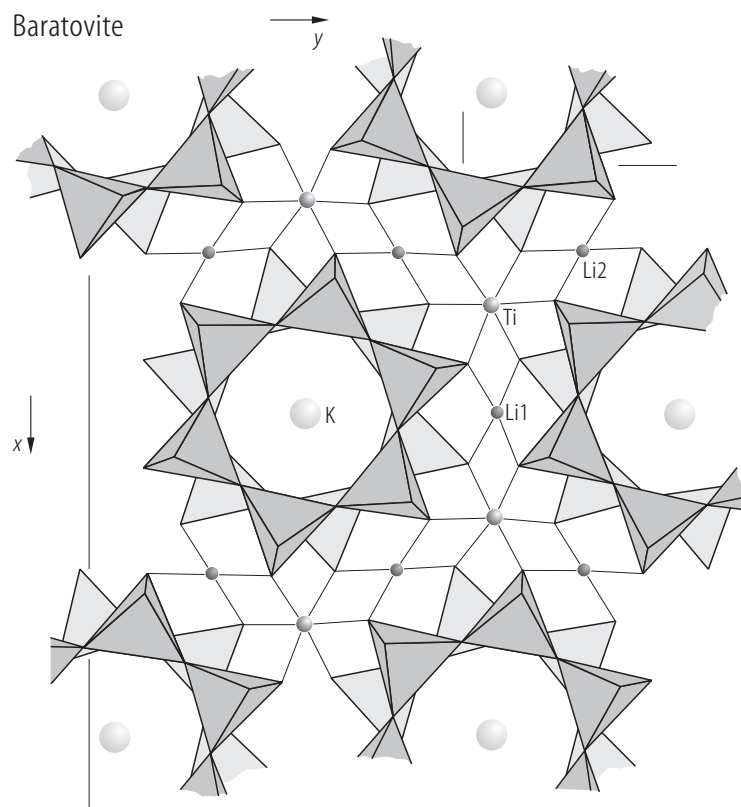


Fig. 5. Baratovite. A partial view of the structure along $[102]$ showing Si-O rings, Ti-O and Li-O polyhedra and K atoms [79M1].

For Fig. 6 see next page

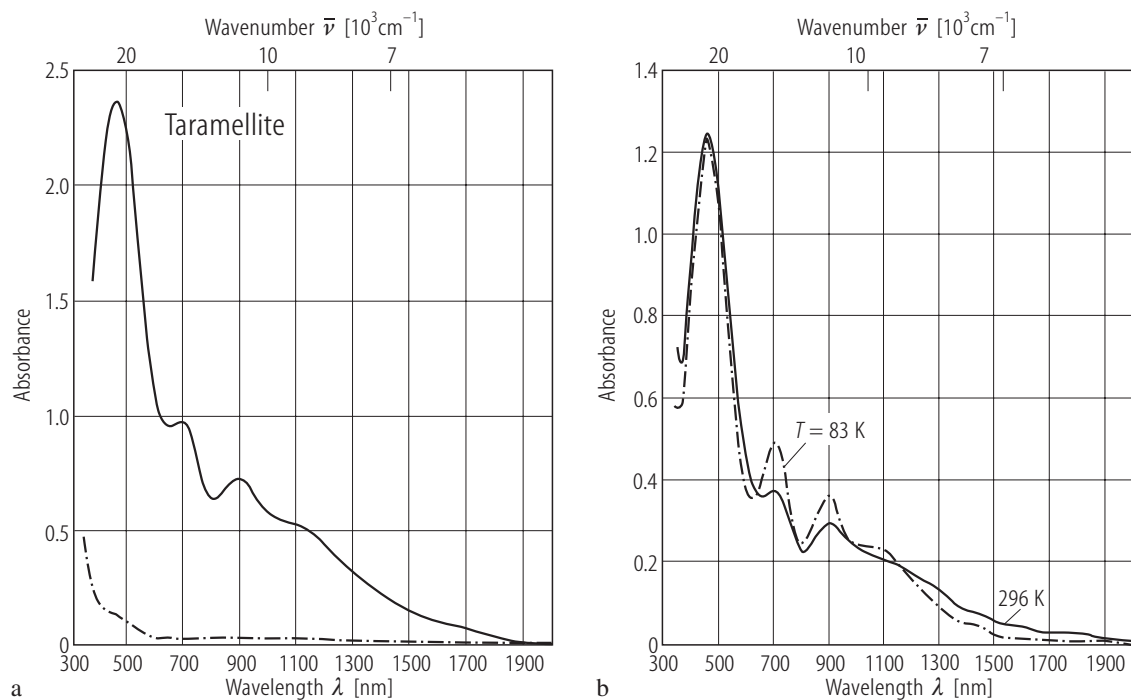


Fig.7. Taramellite³²⁾: **(a)** Polarized absorption spectra at 296 K: solid line $E \parallel z$; broken line: $E \parallel x$ ($\sim E \parallel y$); **(b)** $E \parallel z$ absorption spectra, broken line at 83 K, solid line at 296 K [88M1].

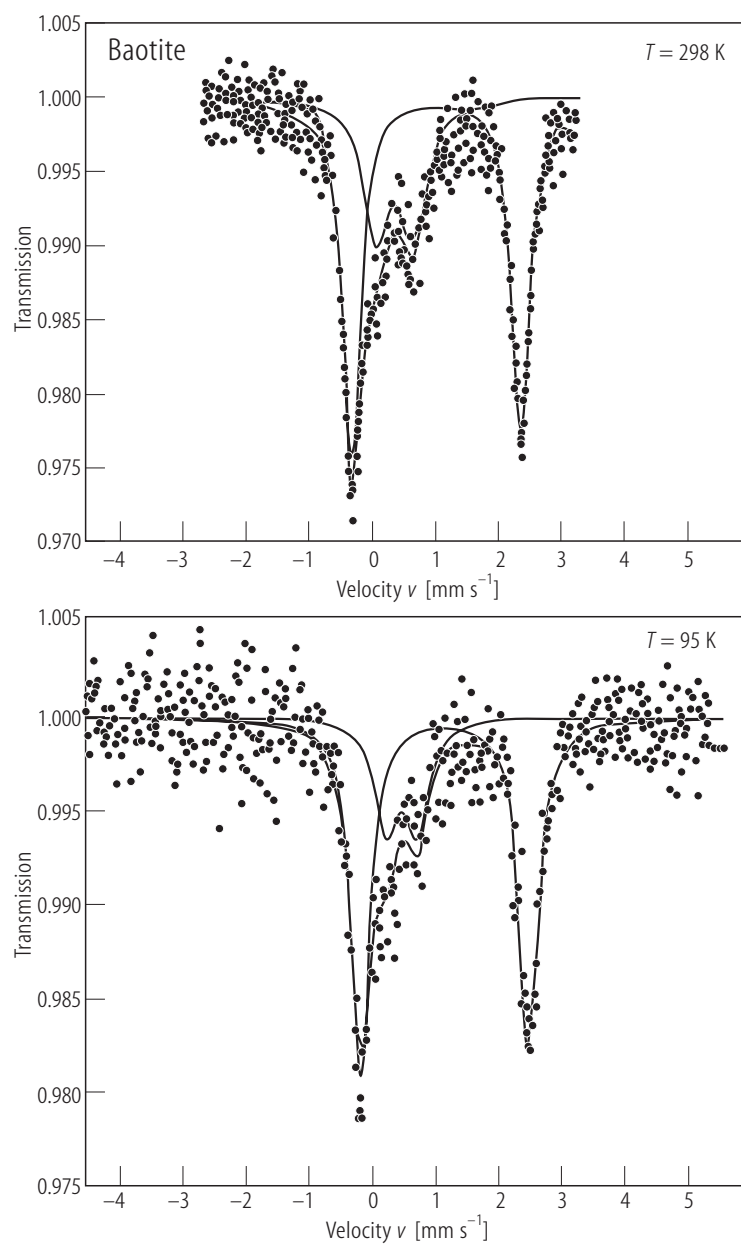


Fig. 6. Baotite^{30). ^{57}Fe NGR spectra at 95 K and 298 K [98S1].}

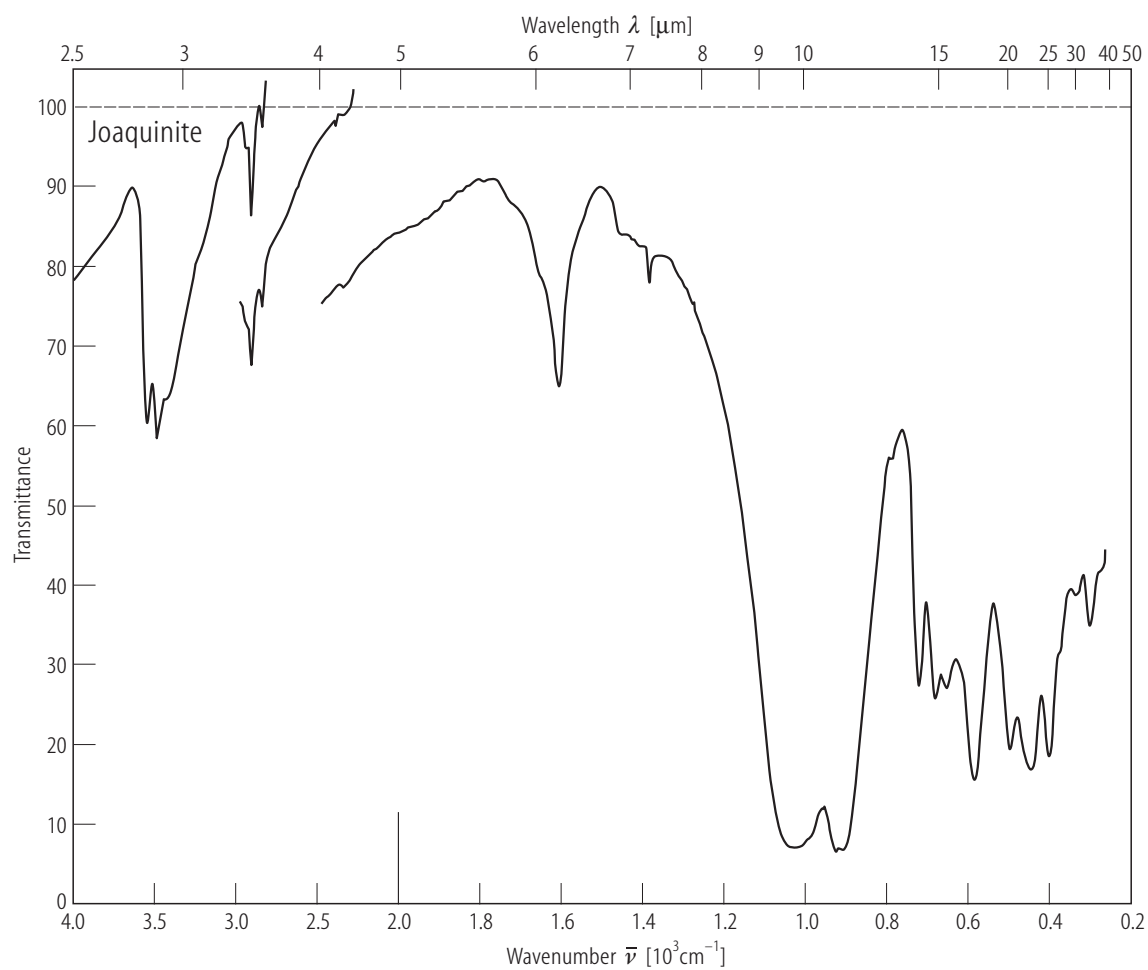


Fig. 8. Joaquinite²⁴⁾. Infrared spectrum [72L1].