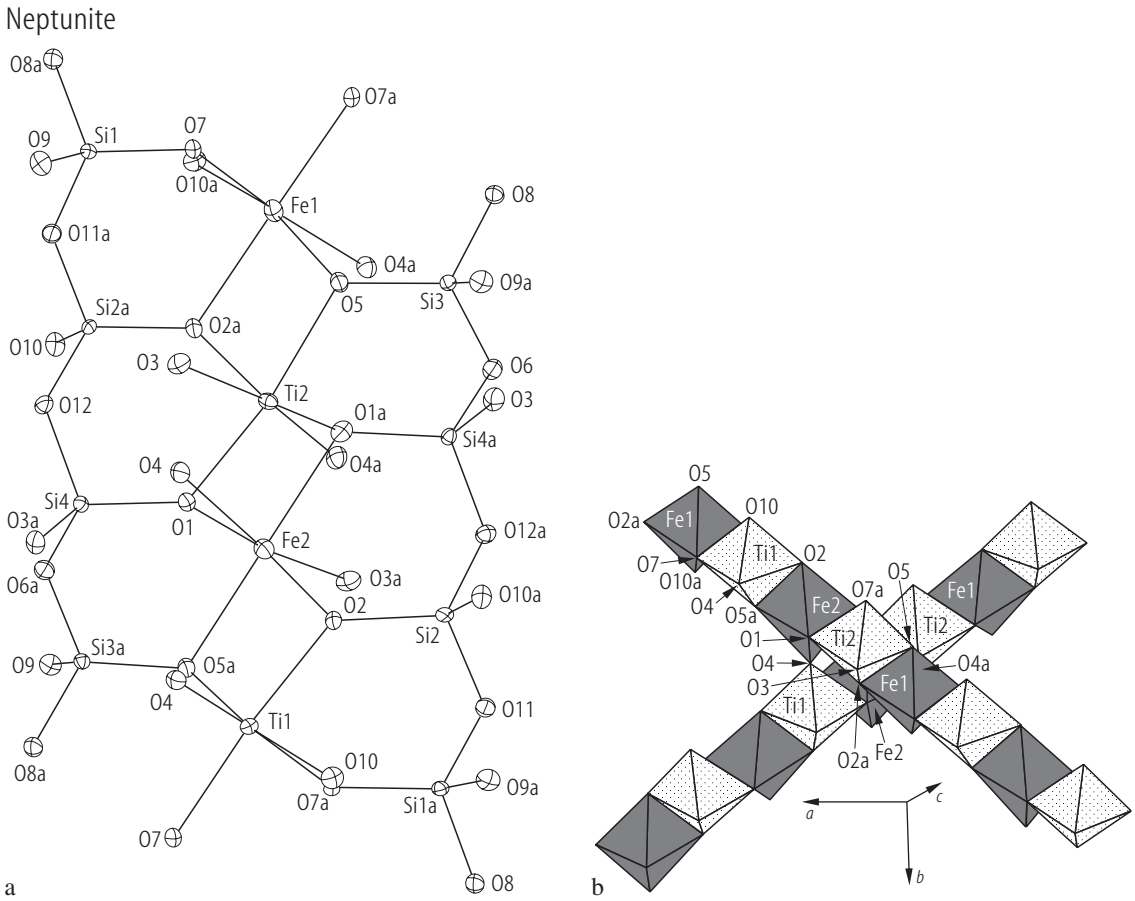

Fig. 1. Neptunite. **(a)** Structure fragment. Pyroxene-like tetrahedral chains enclose octahedral chains. The chain arrangement is cross-linked by a ***c***-glide plane. Displacement parameters are displayed as 90 % probability ovaloids. **(b)** Octahedral chains cross-linked via O4 and O4a [91K1].

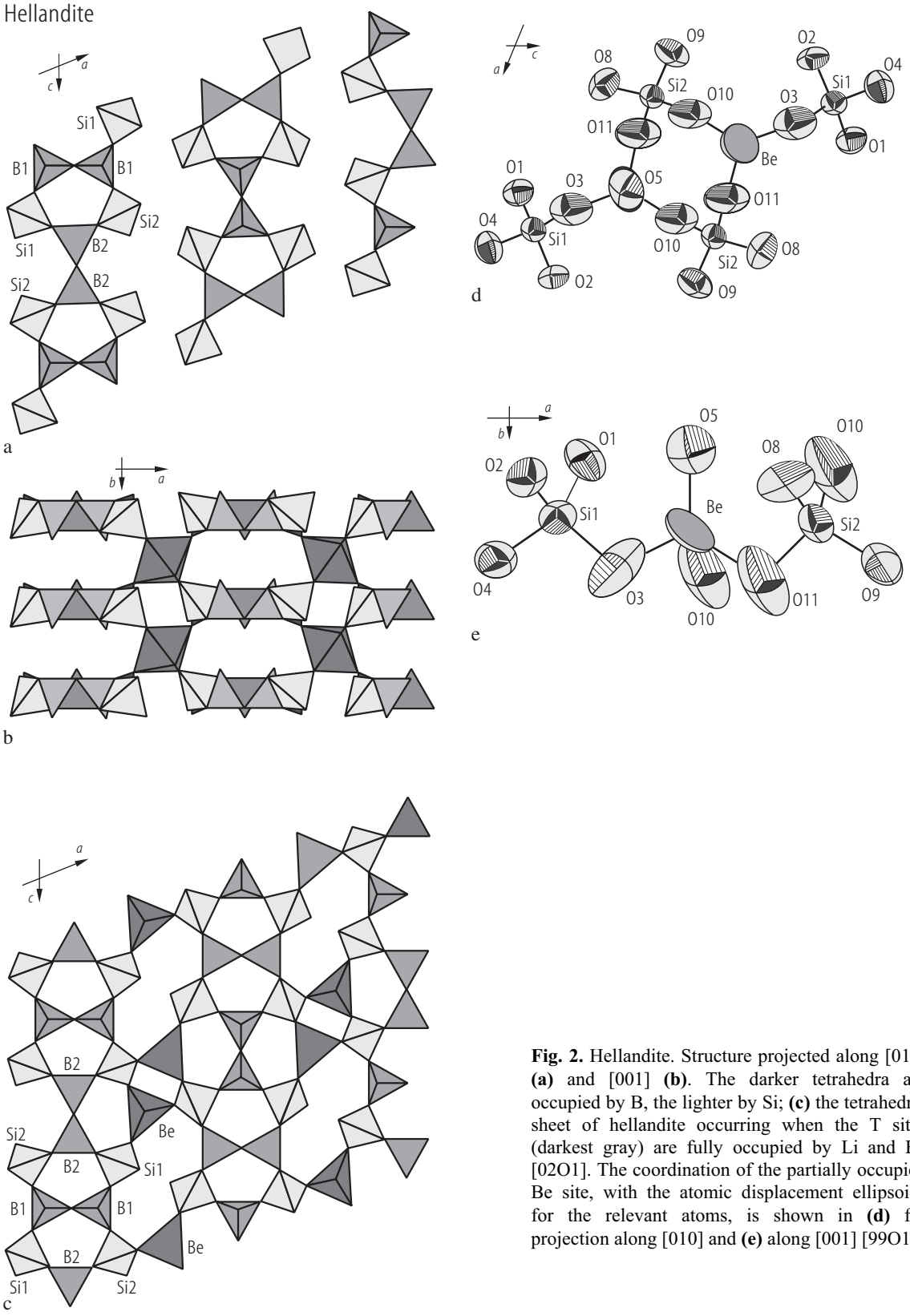

Fig. 2. Hellandite. Structure projected along [010] **(a)** and [001] **(b)**. The darker tetrahedra are occupied by B, the lighter by Si; **(c)** the tetrahedral sheet of hellandite occurring when the T sites (darkest gray) are fully occupied by Li and Be [02O1]. The coordination of the partially occupied Be site, with the atomic displacement ellipsoids for the relevant atoms, is shown in **(d)** for projection along [010] and **(e)** along [001] [99O1].

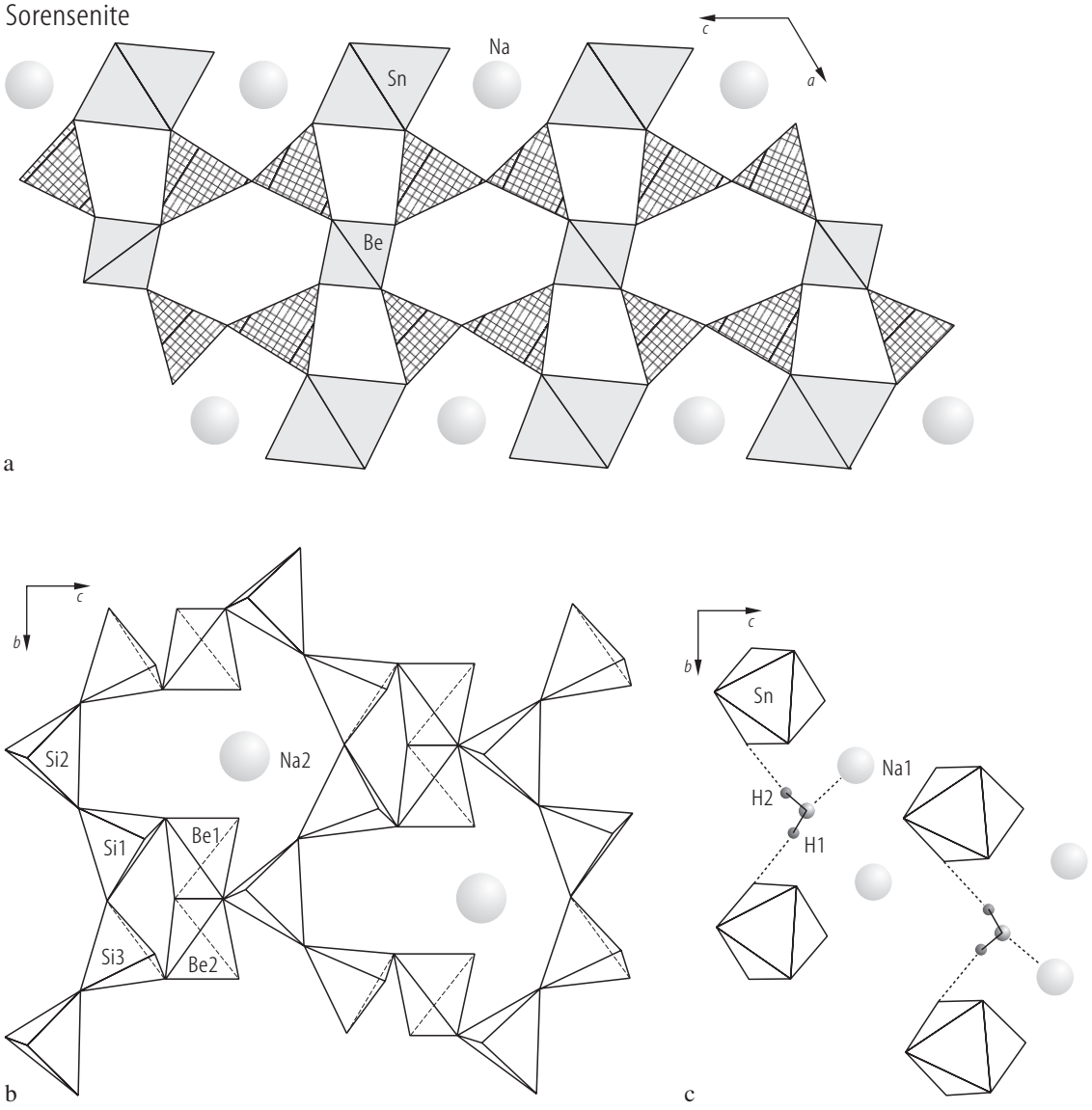

Fig. 3. Sörensenite. **(a)** Diagramatic projection of a part of the structure along the ***b***-axis. The SiO_3 chains (shaded) and Be_2O_6 groups are seen end-on in this view. The Na1 sites, but not the Na2 nor water molecules, are shown [90S1]. **(b)** Projection of the SiO_3 infinite chains and B_2O_6 edge-shared groups onto (100). **(c)** Projection of the SnO_6 octahedra and water molecules onto (100). The oxygen atoms of the water molecule also forms a bond (not shown) to the Na2 atom seen in **(b)** [90S1].

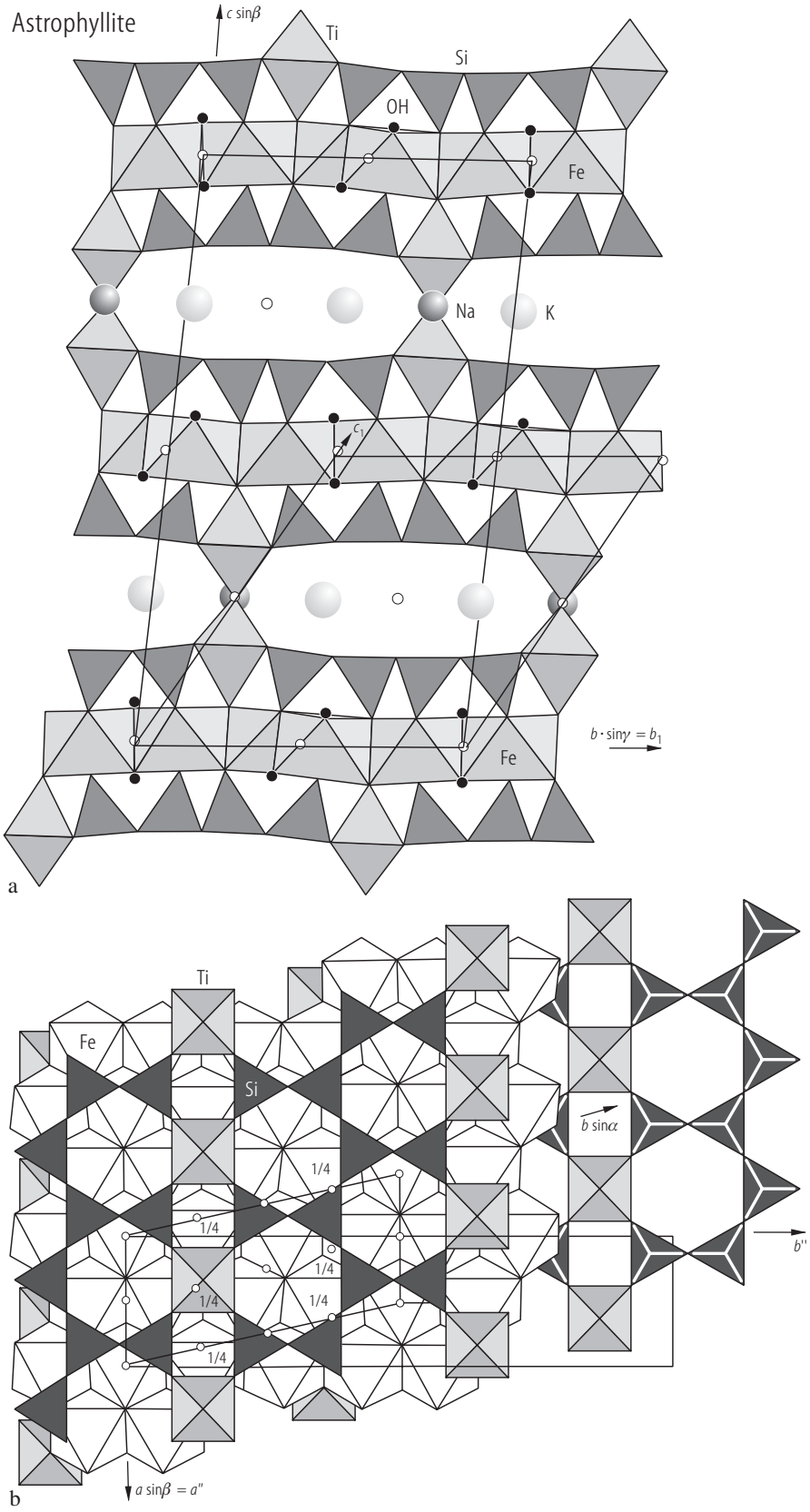

Fig. 4. Astrophyllite. **(a)** Projection of the structure along the [100] direction in the $A\bar{1}$ setting. Centers of inversions are denoted by small open circles. **(b)** Idealized fragment of the triclinic structure showing a TOT sheet projected along the [001] direction and the monoclinic unit with parameters *a*'' and *b*'' [00Y1].

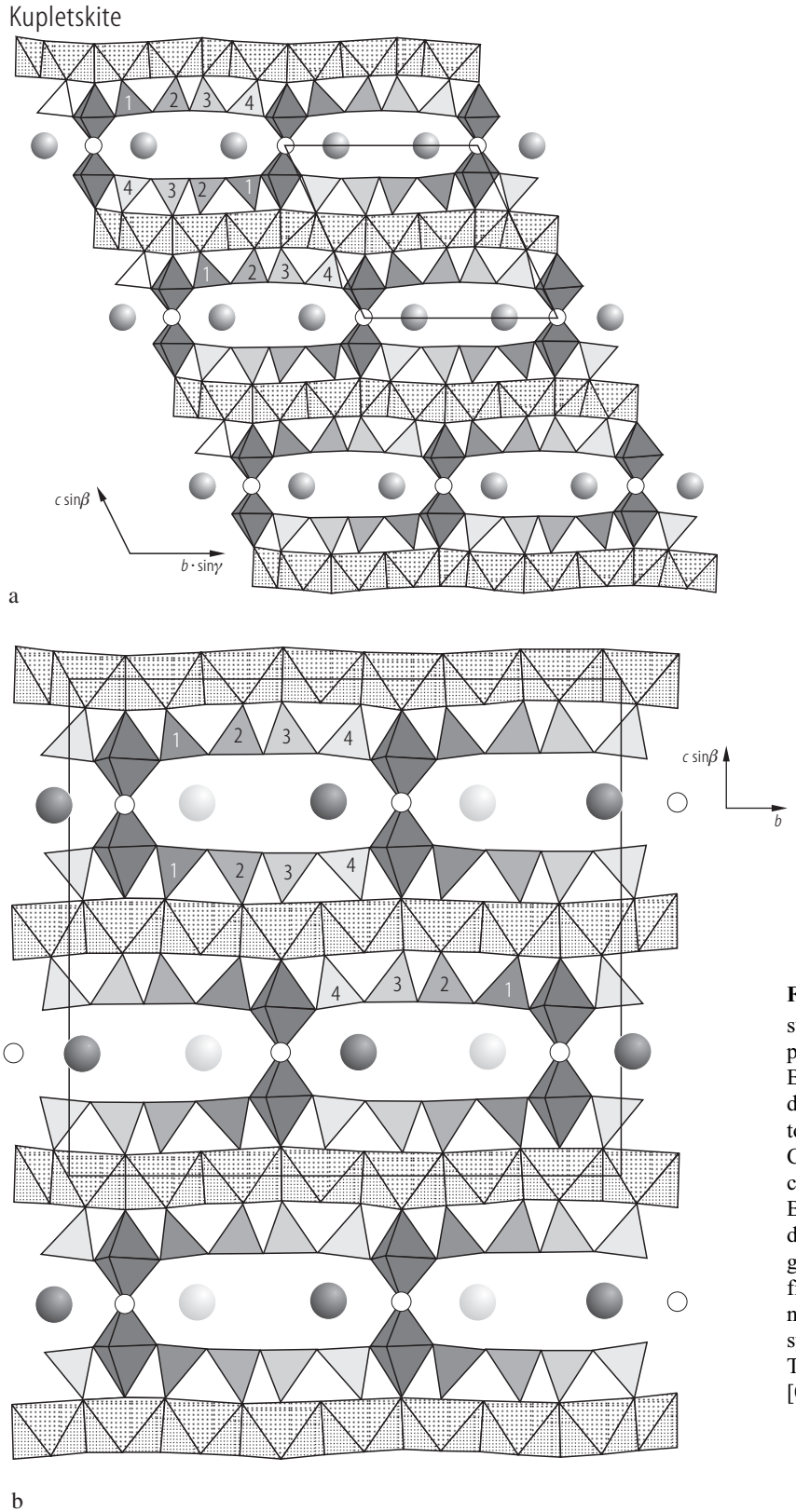

Fig. 5. Kupletskite. Crystal structures: **(a)** triclinic $P\bar{1}$ projected down [100] (A-hatched, B-white, O-sheet-stippled, D-dark gray, T1 to T4 medium gray to light gray), **(b)** monoclinic C2/c projected down [100] (A1-cross-hatched, A2-diagonal lines, B-white, O-sheet-stippled, D-dark gray, T1 to T4- medium gray to light gray). In both figures the four T sites are numbered to illustrate the symmetry across the interlayer. The unit cells are outlined [01P1].

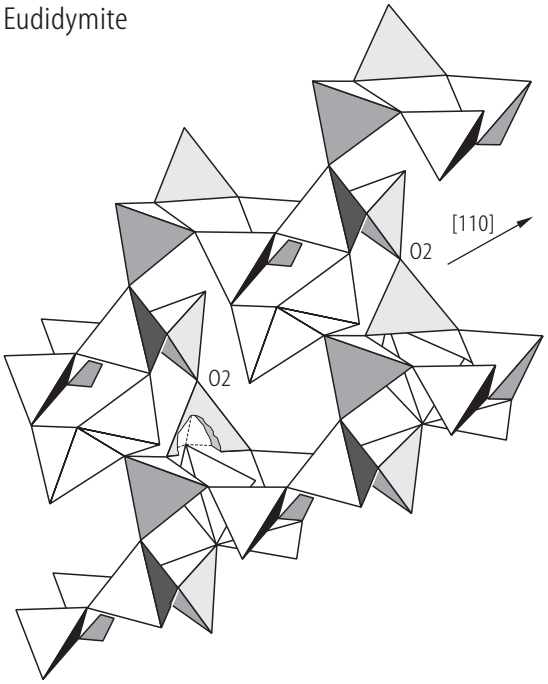

Fig. 6. Eudidymite. A perspective polyhedral drawing of the double sheet which parallels (001). Stippled tetrahedra represent SiO_4 groups and ruled tetrahedra depict BeO_4 groups. The sharing of the "double chains" through O2 in forming double sheets can be seen [72F1].

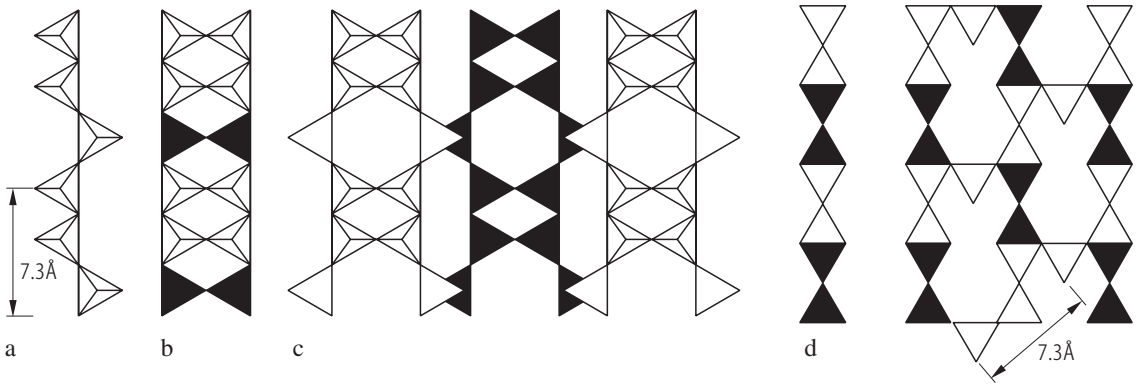

Fig. 7. Wollastonite chain **(a)**, epididymite strip **(b)**, $[Si_{12}O_{30}]_{\infty\,\infty}$ layer in the structure of $K_2Be_2Si_6O_{15}$ (**c**) and eudidymite $[Si_{12}O_{30}]_{\infty\,\infty}$ layer (**d**) [76N1].

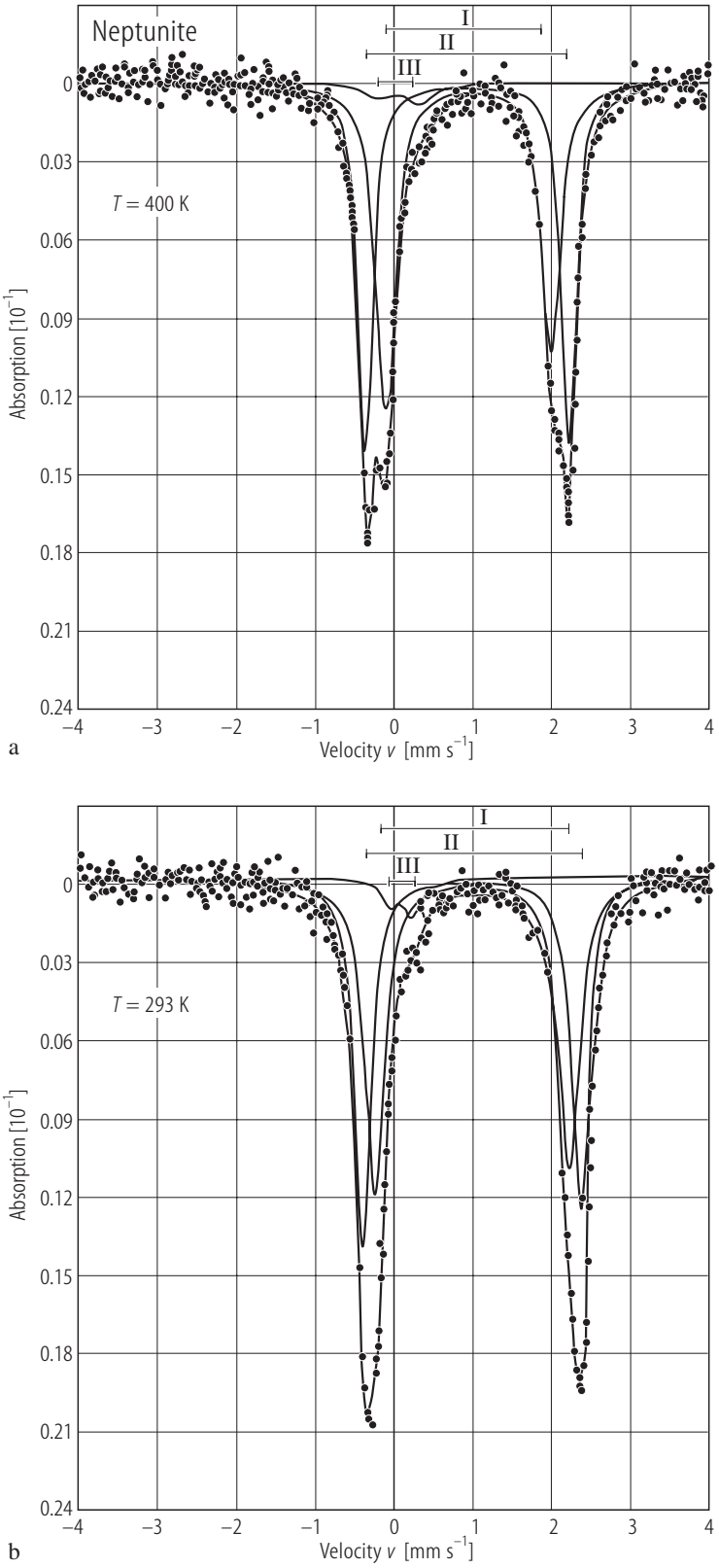

Fig. 8. Neptunite. ^{57}Fe NGR spectra of a single crystal with $\boldsymbol{k} \parallel \boldsymbol{b}$ at 400 K and 293 K. The calculated intensities are represented by solid lines, the experimental data by dots [97L1].

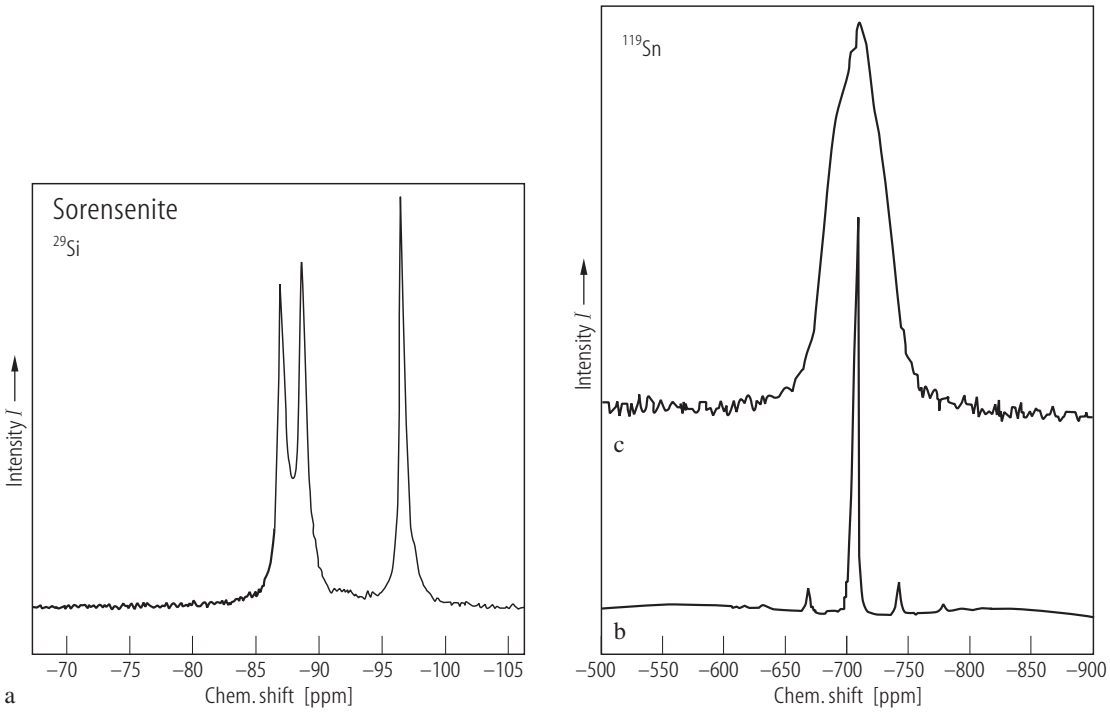

Fig. 9. Sörensenite. ^{29}Si MAS NMR spectrum, 1580 transients, 30 s recycle delay, 2 µs 45° pulse, spinning rate 3900 Hz. The relative intensities are 1:1:1, the half height linewidths are 50, 50 and 35 Hz, respectively [90S1], **(b)** ^{119}Sn MAS NMR spectrum, 1580 transient, 30 s recycle delay, 5 µs 90^0 pulse, spinning rate 3980 Hz, (**c**) 119.9 MHz ^{119}Sn static NMR spectrum at the same conditions as in (b).

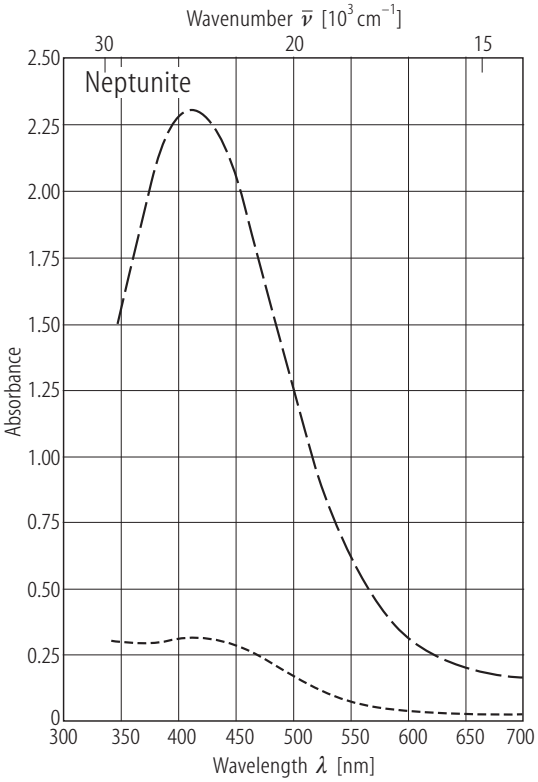

Fig. 10. Neptunite. Polarized absorption spectra (a light brown zone), at 296 K. Sample thickness: 0.010 nm, short dash: ***E*** || ***X***; long dash: ***E*** || ***Y*** [88M1].