

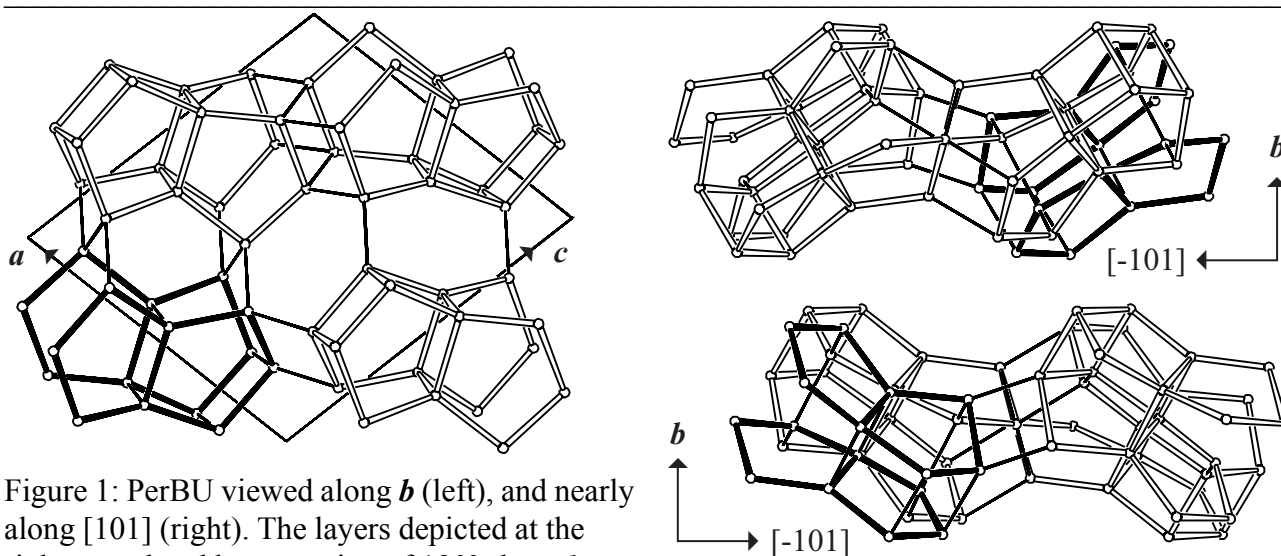
Building scheme for STT



1. Periodic Building Unit – 2. Connection mode – 3. Projections of the unit cell content
4. Channels and/or cages – 5. Supplementary information

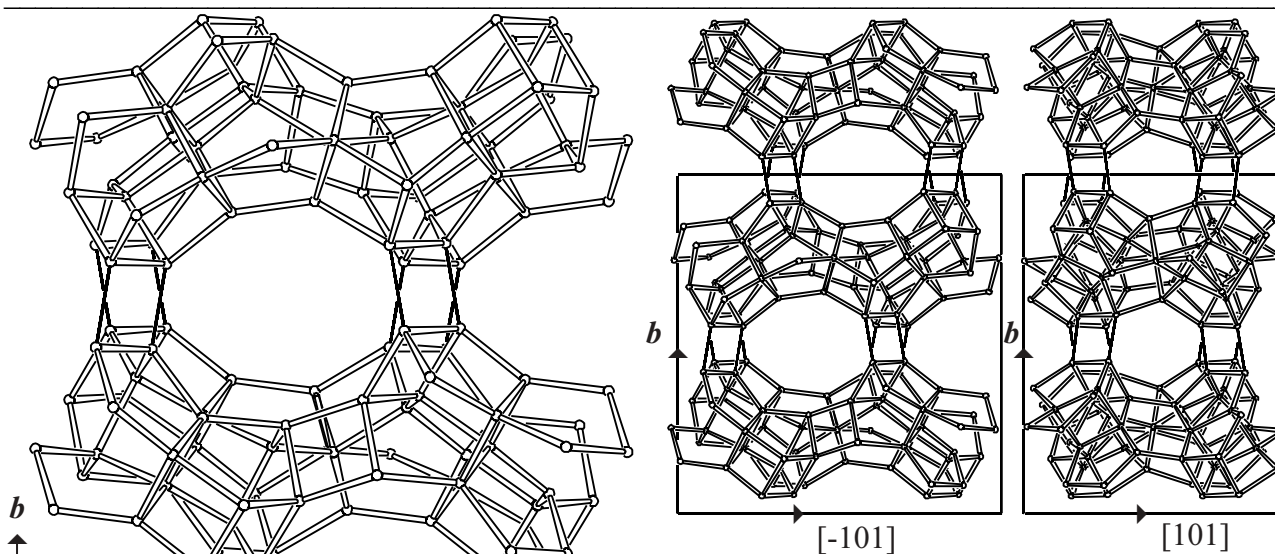
1. Periodic Building Unit:

The Periodic Building Unit (PerBU) in monoclinic STT is composed of units of 16 T atoms and equals the ac layer shown in Figure 1. The T16-unit consists of two 5-3 units (bold in Figure 1). Two “nearest neighbor” T16-units are related by inversion centers midway between the two units; the two “next-nearest” T16-units are related by pure translations along a , and c . The T16-units are linked in the ac plane through (finite) single- and double zigzag chains, 4- and 6-rings (Figure 1).



2. Connection mode:

Neighboring PerBUs, related by a rotation of 180° about b , are connected along b through 4-rings as shown in Figure 2.



3. Projections of the unit cell content: See Figure 2. ▲

4. Channels and/or cages:

The cavity that describes the intersection between the 7-ring channel parallel to $[-101]$ and the 9-ring channel parallel to $[101]$ is depicted in Figure 3. The **pore descriptor** is added. The fusion of the cavities is illustrated in Figure 4.

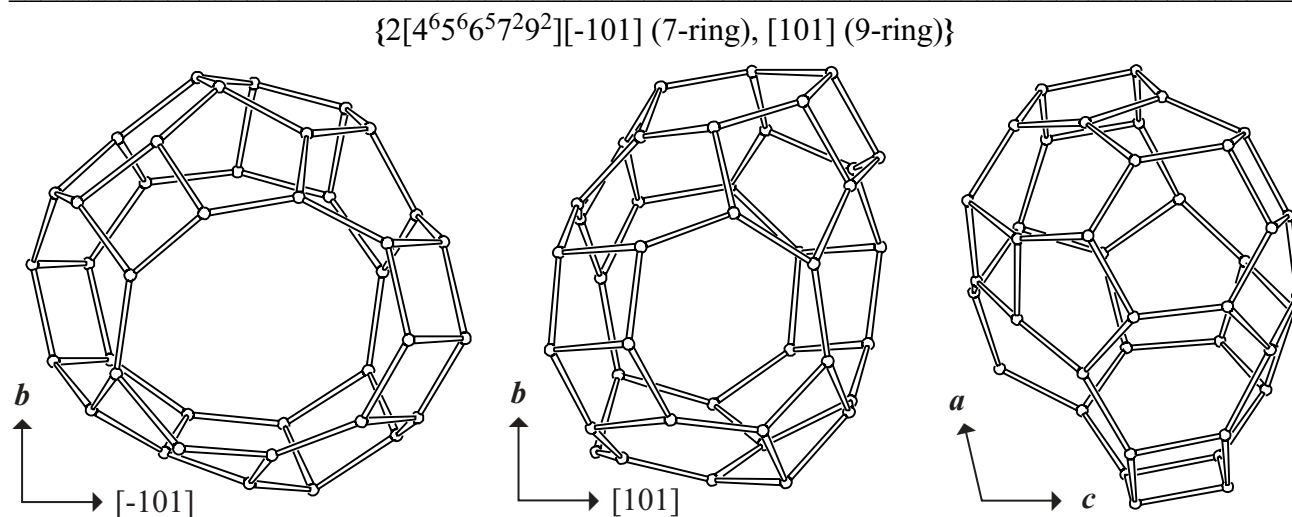


Figure 3. Cavity in STT viewed along $[101]$ (left), along $[-101]$ (middle) and along b (right).

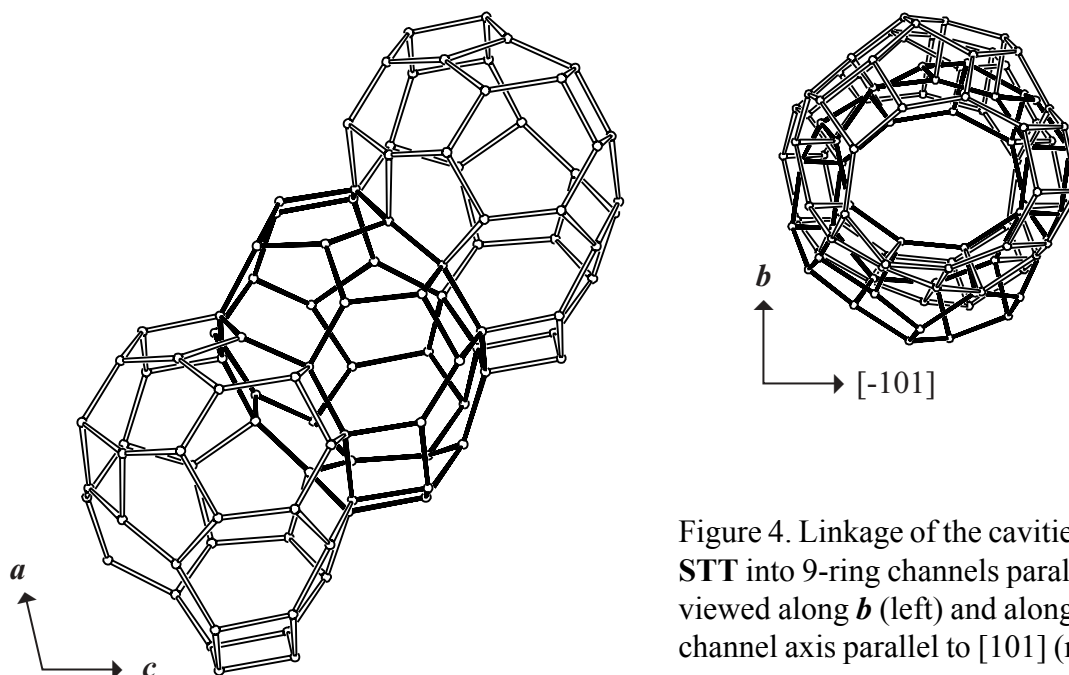


Figure 4. Linkage of the cavities in monoclinic STT into 9-ring channels parallel to $[101]$ viewed along b (left) and along the 10-ring channel axis parallel to $[101]$ (right). ▲

5. Supplementary information:

Other framework types containing (modified) 5-rings

5-Rings can be connected in several other ways. In all cases additional T atoms are needed to build the framework.

In the **INTRO**-pages links are given to a detailed description of a sub-set of framework types that contain (modified) 5-rings (choose: **5-Rings**). There is also a link provided to a summary of the PerBUs used in the building schemes of these framework types (choose: **Appendix; Figure 6**). ▲