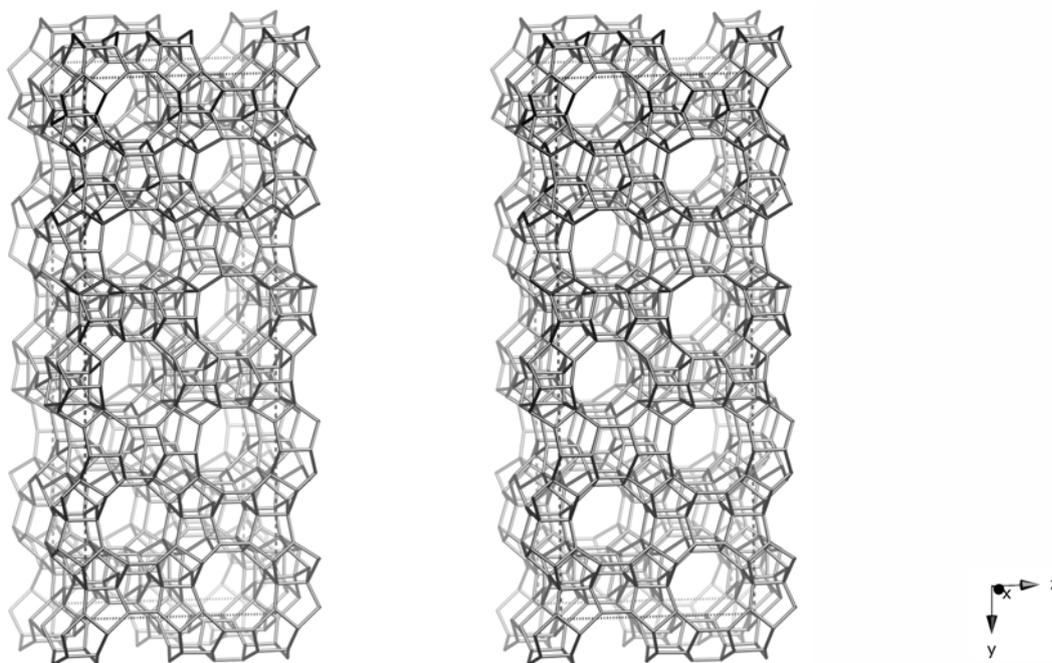


Framework Type Data



framework viewed along [100]

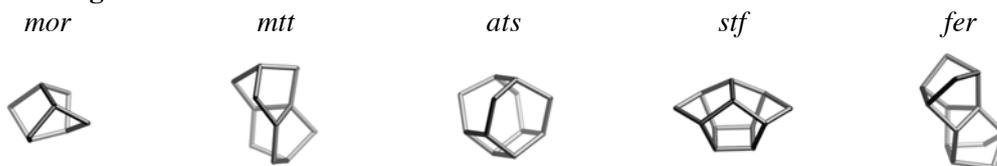
Idealized cell data: orthorhombic, *Cmcm*, $a = 14.3\text{\AA}$, $b = 56.8\text{\AA}$, $c = 20.3\text{\AA}$

Coordination sequences and vertex symbols:

see Appendix A for a list of the coordination sequences and vertex symbols for the 24 T-atoms

Secondary building units: 5-1

Composite building units:



Materials with this framework type:

*IM-5⁽¹⁾

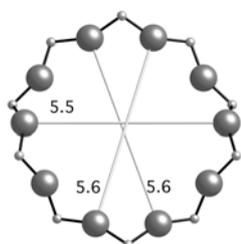
Type Material: IM-5

Type Material Data

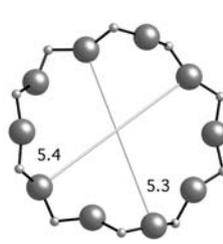
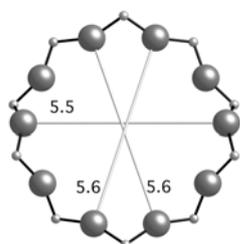
Crystal chemical data: $[\text{Si}_{288}\text{O}_{576}]$ -IMF
orthorhombic, $Cmcm$, $a = 14.2088\text{\AA}$, $b = 57.2368\text{\AA}$, $c = 19.9940\text{\AA}$ ⁽¹⁾

Framework density: $17.7 \text{ T}/1000\text{\AA}^3$

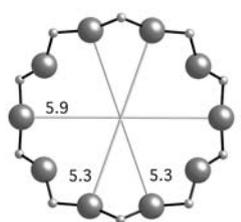
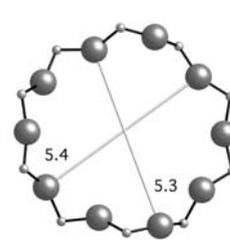
Channels: $\{[001] \mathbf{10} \ 5.5 \times 5.6 \leftrightarrow [100] \mathbf{10} \ 5.3 \times 5.4\}^{**} \leftrightarrow \{[010] \mathbf{10} \ 5.3 \times 5.9\} \leftrightarrow \{[001] \mathbf{10} \ 4.8 \times 5.4 \leftrightarrow [100] \mathbf{10} \ 5.1 \times 5.3\}^{**}$
(There is central 2D channel system (above: left) connected through 10-rings along [010] (above: after second \leftrightarrow) to another 2D channel system (above: after third \leftrightarrow) on either side. There is no further connection along [010].)



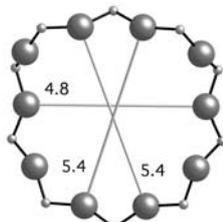
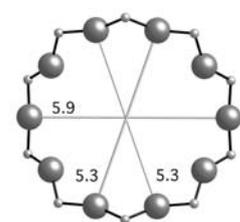
10-ring (center) viewed along [001]



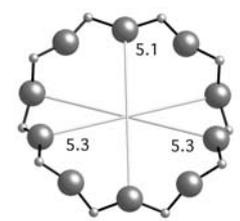
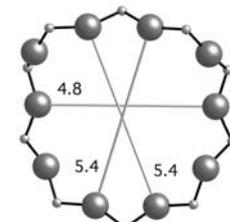
10-ring (center) viewed along [100]



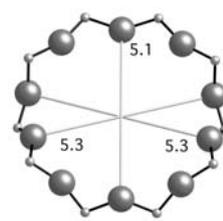
10-ring viewed along [010]



10-ring (side) viewed along [001]



10-ring (side) viewed along [100]

**References:**

- (1) Baerlocher, Ch., Gramm, F., Massüger, L., McCusker, L.B., He, Z., Hovmöller, S. and Zou, X. *Science*, **315**, 1113-1116 (2007)