## **Supplementary Information**

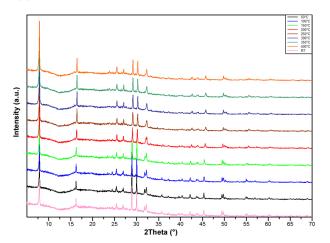
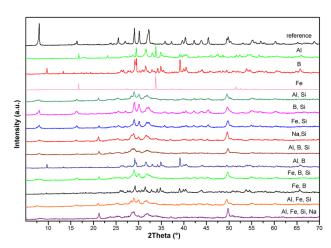
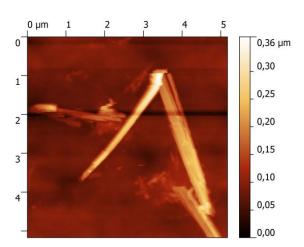


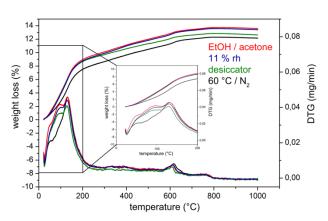
Fig. A: XRD patterns of sample b-2 recorded from room temperature to 400  $^{\circ}\text{C}$  in 50  $^{\circ}$  steps.



**Fig. B**: XRD patterns of samples from conventional hydrothermal synthesis with addition of  $B_2O_3$ ,  $Na_2O$ ,  $Al_2O_3$ ,  $SiO_2$  and  $Fe_2O_3$  according to the composition of borosilicate glass.



 $\label{eq:Fig.C.} \textbf{Fig. C.} \ Topographical \ AFM \ image \ of \ microwave \ synthesized \ tobermorite; sample: q-3-MW.$ 



15

Fig. D: TGA data of sample q-3-MW dried using four different methods: red: stirred in dry EtOH for 30 mins and washed with dry acetone under suction; blue: stored at 11 % rh (saturated LiCl solution) for 3 d; green:  $_{\rm 20}$  dried in a desiccator under vacuum as described in the experimental part; dried at 60 °C under N $_{\rm 2}$  for 3d.