

Supporting Information:

Morphology and topology assessment in hierarchical zeolite materials: adsorption hysteresis, scanning behavior, and domain theory

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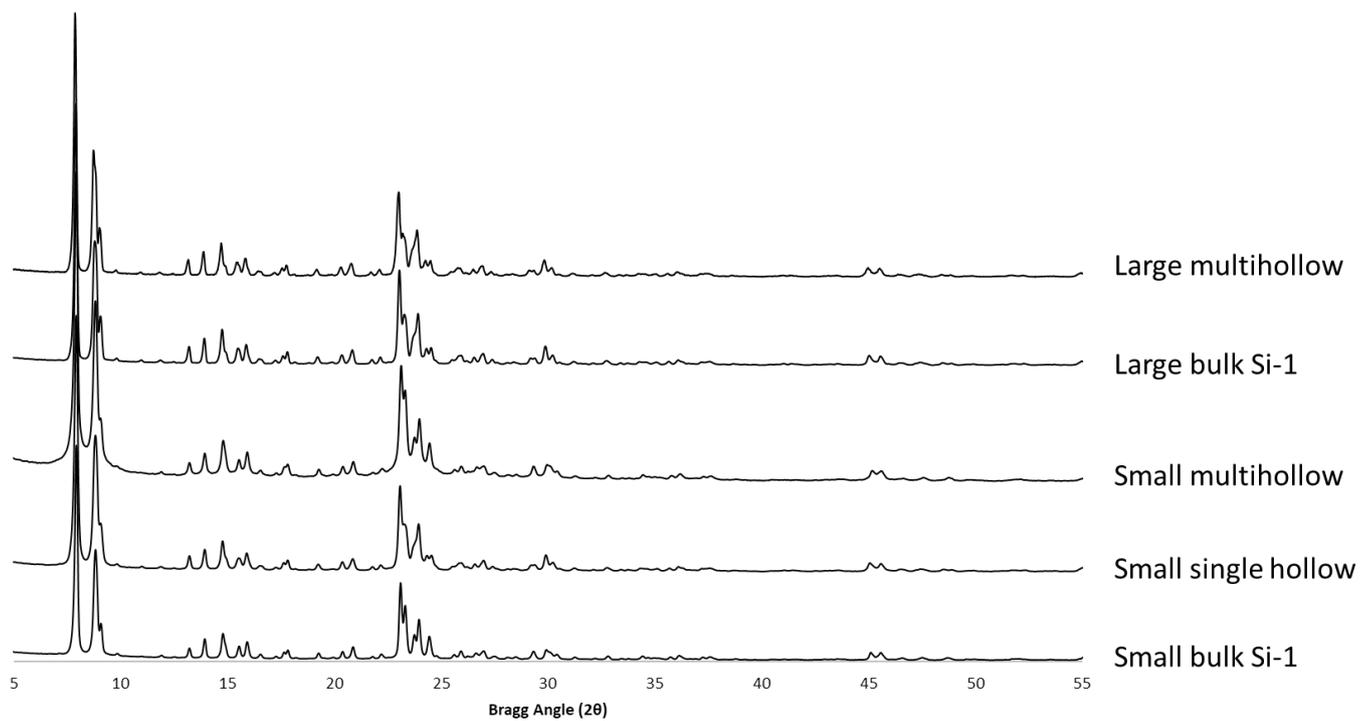


Figure S1. XRD pattern of silicalite-1 samples

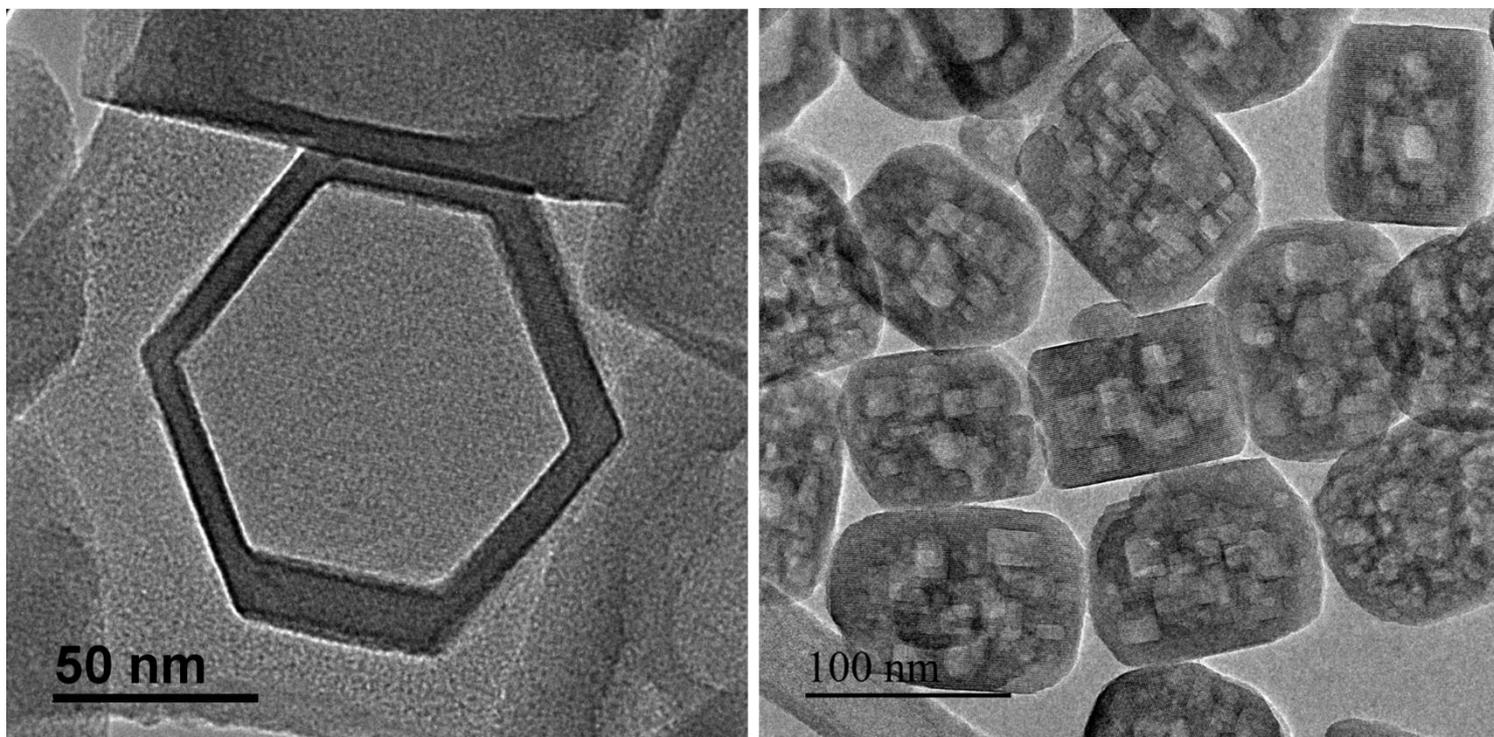


Figure S2. TEM images demonstrating crystalline pattern in small single (left) and multi (right) hollow crystals

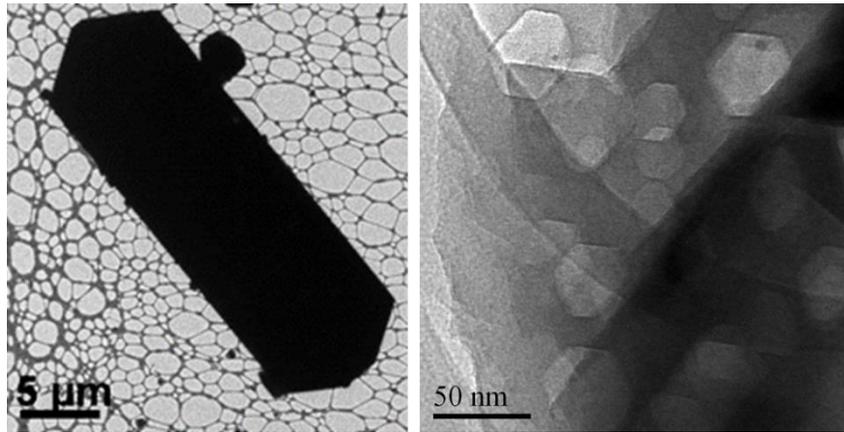


Figure S3. Additional TEM images of large multihollow crystals

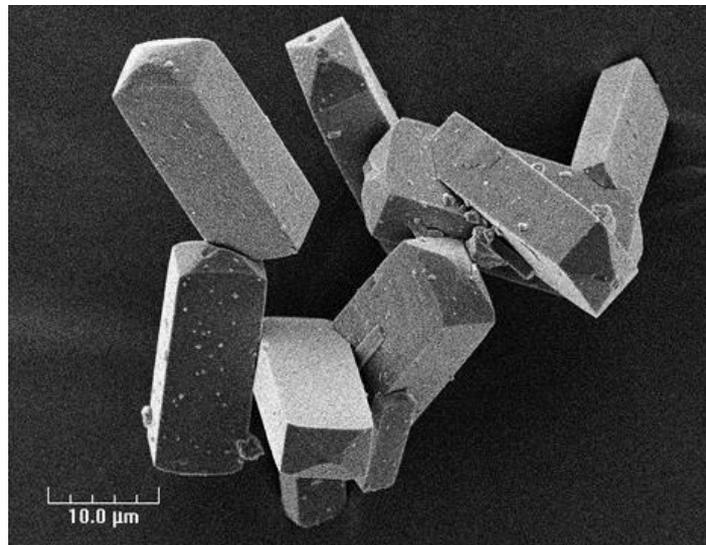


Figure S4. SEM image of large bulk crystals

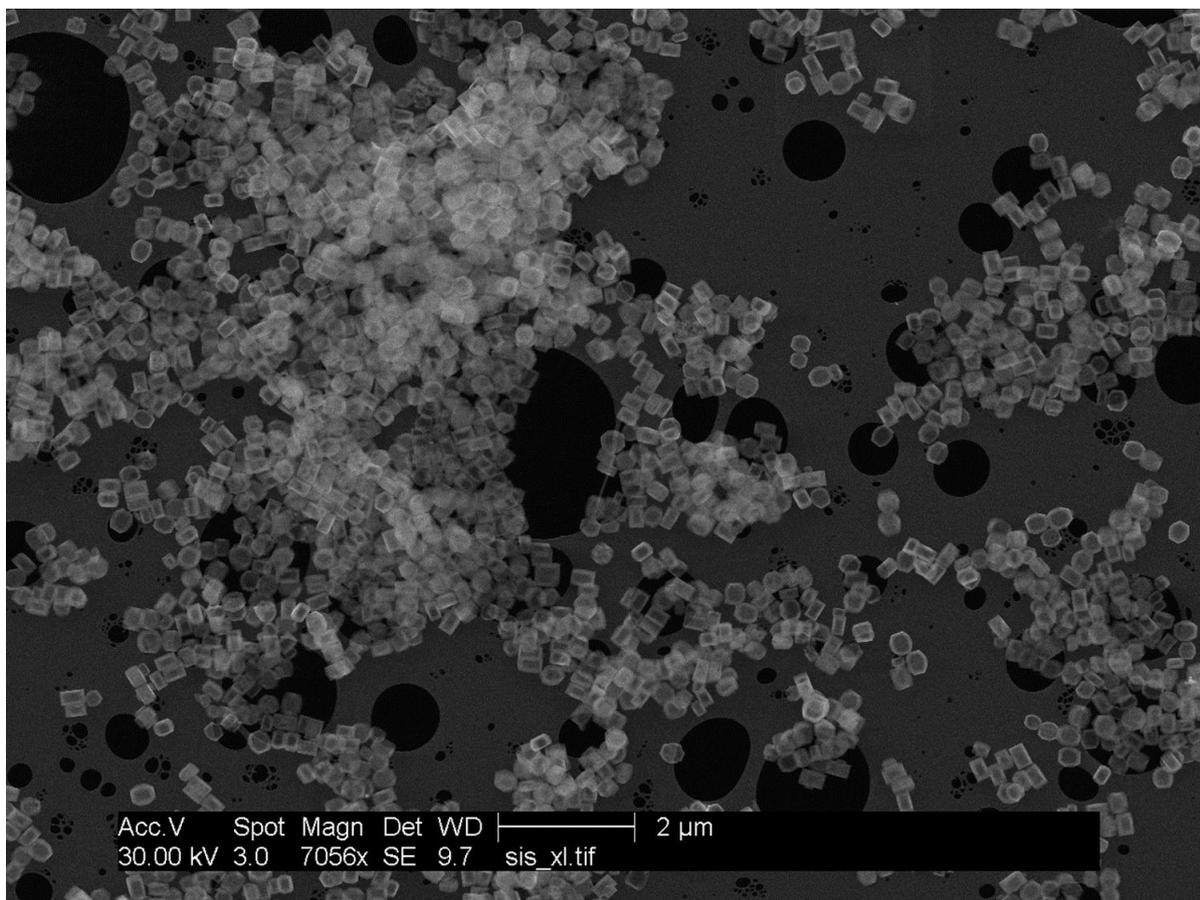


Figure S5. Large SEM image of small single hollow crystals

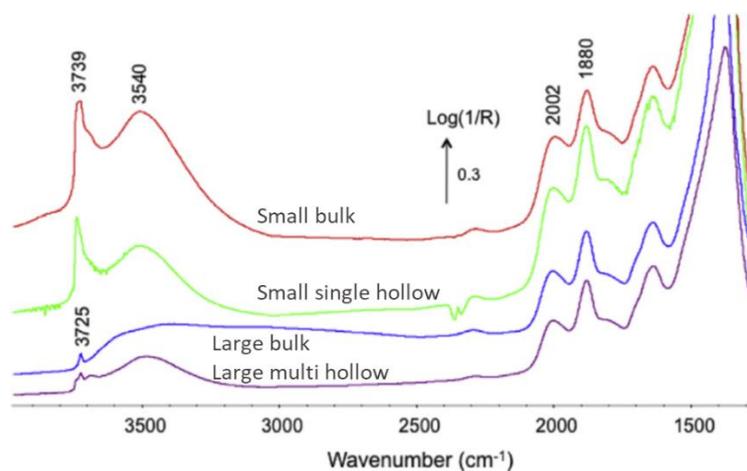


Figure S6. DRIFTS spectra collected over the various samples at 150 °C after drying at 250 °C for 30 min

Experimental section: The DRIFTS spectra were recorded on a Nicolet Magna 550 FTIR spectrometer equipped with a MCT detector cooled with liquid nitrogen. Between 1 and 5 mg of zeolite powder was deposited onto a SiC bed in the crucible of a DRIFTS reaction cell. The DRIFTS spectra of the zeolites were plotted as $\log 1/R$, where R is the sample reflectance. The function $\log 1/R$ provides better linearity between band intensity against coverage than that given by the Kubelka-Munk function for strongly absorbing media, such as those based on oxides.