Electronic supplementary information (ESI)

Morphology–Transport Relationships for SBA-15 and KIT-6 Ordered Mesoporous Silicas†

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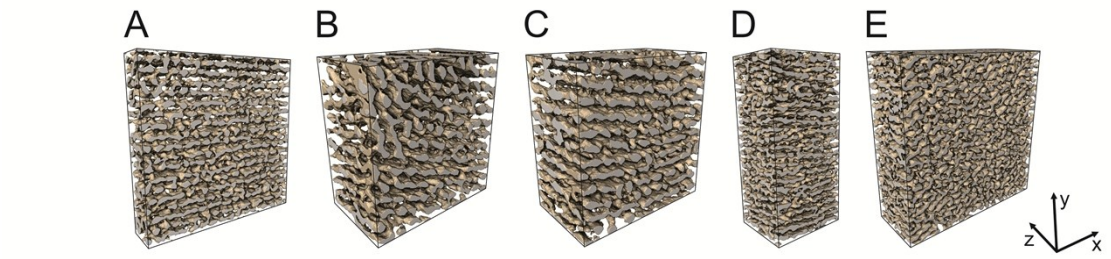

Figure S1.

Five blocks from different regions of the SBA-15 crumb (*cf.* Fig. 2A in the main text) used as final image stacks. Their dimensions are summarized in Table S1.

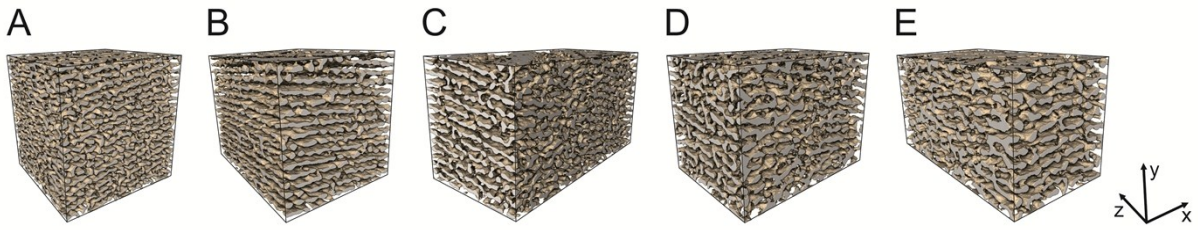

Figure S2.

Five blocks from different regions of the KIT-6 crumb (*cf.* Fig. 2B in the main text) used as final image stacks. Their dimensions are summarized in Table S1.

Table S1.

Dimensions of the final image stacks used as geometrical models in the pore-scale simulations of hindered diffusion.

Image stack	SBA-15 ($x \times y \times z$ nm^3)	KIT-6 ($x \times y \times z$ nm^3)
A	196 × 189 × 38	212 × 212 × 203
B	122 × 126 × 71	157 × 159 × 207
C	122 × 126 × 71	282 × 151 × 144
D	113 × 243 × 90	188 × 138 × 139
E	235 × 235 × 85	116 × 118 × 221

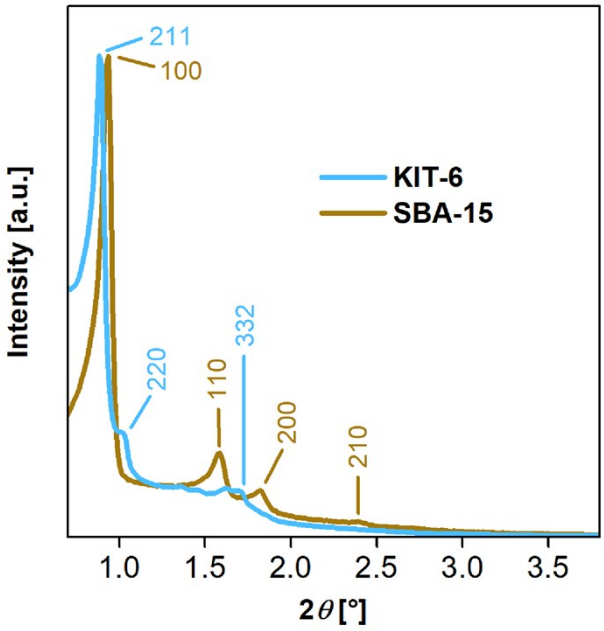

Figure S3.

Low-angle XRD patterns, which show the expected reflections and symmetry groups for the two materials, that is, hexagonal *p6mm* symmetry for SBA-15 silica and cubic $Ia\bar{3}d$ symmetry for KIT-6 silica.

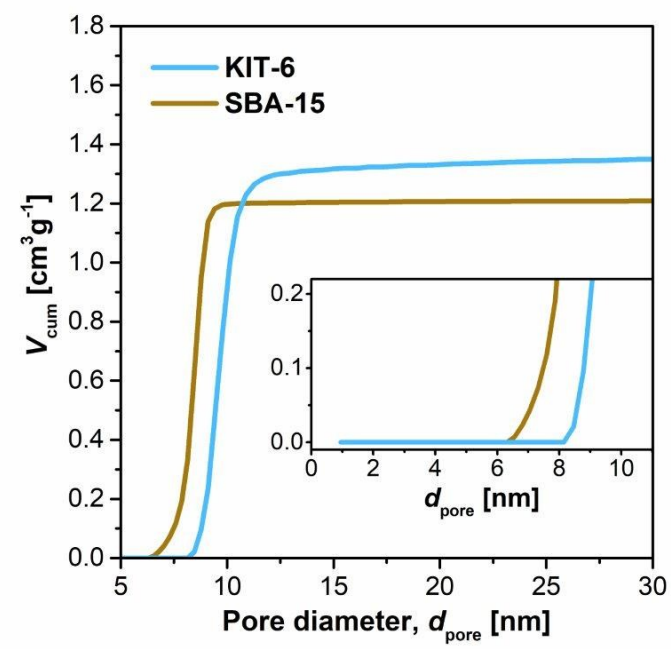

Figure S4.

NLDFT cumulative pore volumes for the SBA-15 and KIT-6 silica powder samples.

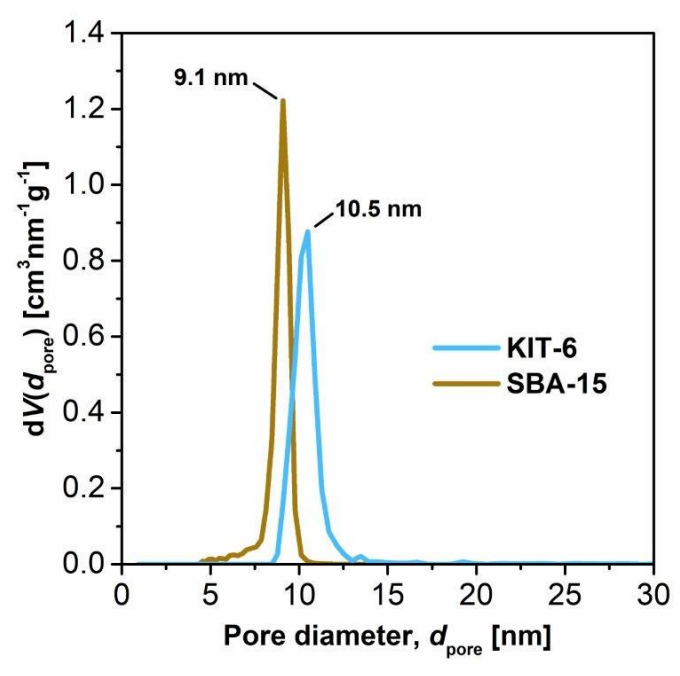

Figure S5.

Pore size distributions derived from the desorption branches of the physisorption isotherms. The d_{meso}-values for SBA-15 and KIT-6 silica refer to the mode of the distributions.