Electronic Supplementary Information

Polymer-Derived Nanoporous Silicon Carbide with Monodisperse Spherical Pores

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SEM image of SiC-1

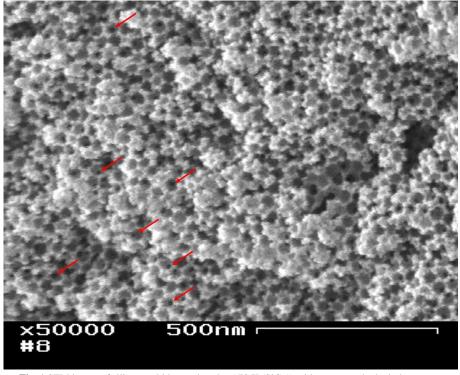


Fig. 1 SEM image of silicon carbide pyrolysed at 973 K (SiC-1) with arrow marked window pores

Distance measurements showed that the marked pores are always in the size range of about 10 nm. Similar pictures and results can be seen for SiC-2 and SiC-3, as well (not shown here).

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NMR spectra deconvolution results

Signals with Gaussian peak shape have been used to fit the spectra and furthermore, the peak positions have been kept fixed.

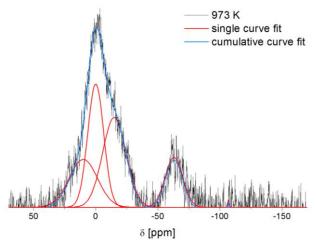


Fig. 2 Deconvolution of NMR spectra for SiC-1

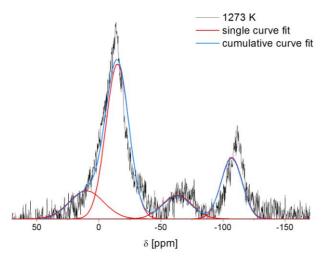


Fig. 3 Deconvolution of NMR spectra for SiC-2

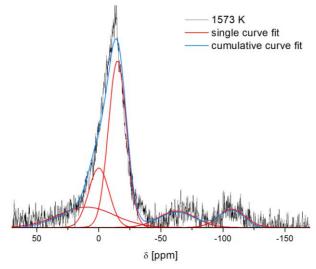


Fig. 4 Deconvolution of NMR spectra for SiC-3

SAXS pattern fitting curves

SAXS pattern fitting was performed using *Scatter* (http://www.chemie.uni-hamburg.de/pc/polymer/software.html, Version 2.5). Differences between the measured and the fitted curve can be explained by particle interactions which are not taken into account in *Scatter*.

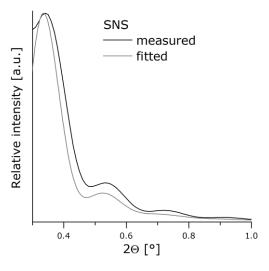


Fig. 5 SAXS pattern fitting for silica nanospheres SNS

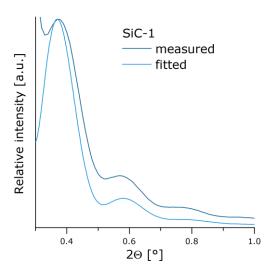


Fig. 6 SAXS pattern fitting for SiC-1

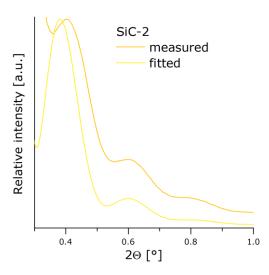


Fig. 7 SAXS pattern fitting for SiC-2

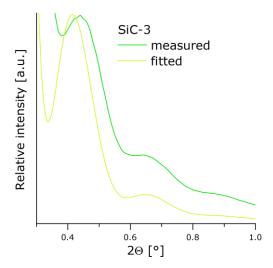


Fig. 7 SAXS pattern fitting for SiC-3