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Supporting Information

Hierarchically 3D Ordered Macro-/Mesoporous Organosilica with an Inverse Opal Morphology Designed by a Combination of Nanocasting and Pseudomorphic Transformation

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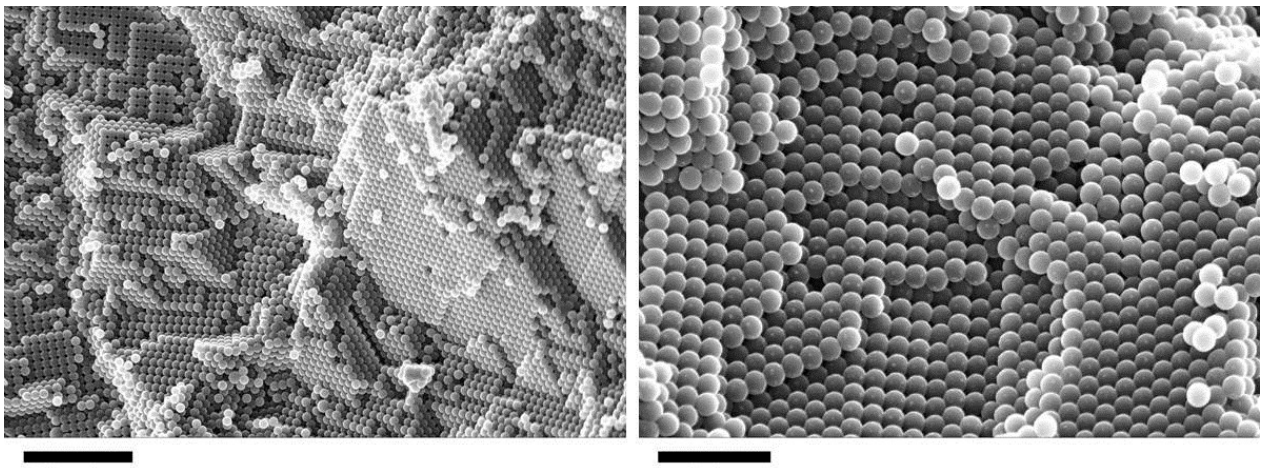

Fig. S1 SEM images of the used PMMA colloid crystal. Scale bar in the left SEM image is 5 µm and in the right SEM image 2 µm.

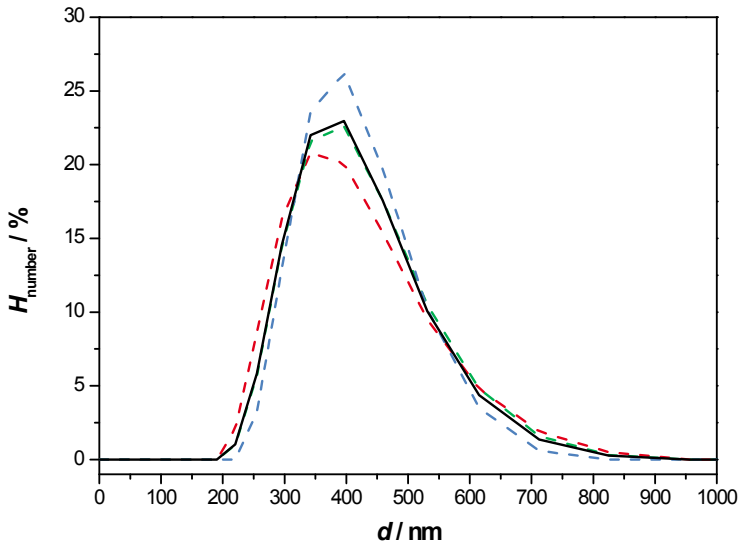

Fig. S2 Particle size distributions of the used PMMA particle. Measurement 1 red dashed line, measurement 2 green dashed line, measurement 3 blue dashed line, arithmetic mean value of the three measurements black line.

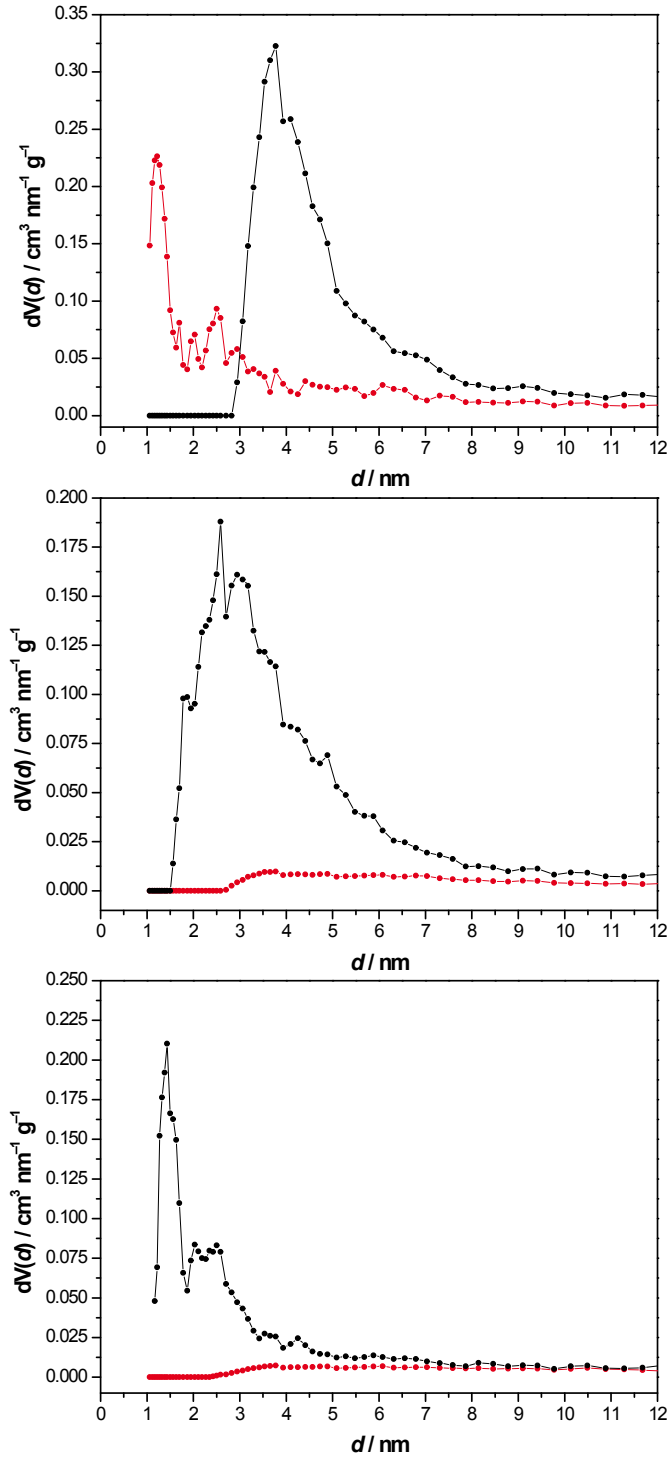

Fig. S3 Pore size distributions of the different inverse opal structured organosilica materials before and after the pseudomorphic transformation synthesis step (NLDFT-kernel: N_2, 77 K, silica, cylind. pores, adsorption branch). Red curves before alkaline surfactant treatment, black curves after alkaline surfactant treatment. Inverse opal phenylene-bridged material (top), inverse opal divinylbenzene-bridged material (center), inverse opal divinylaniline-bridged material (bottom).

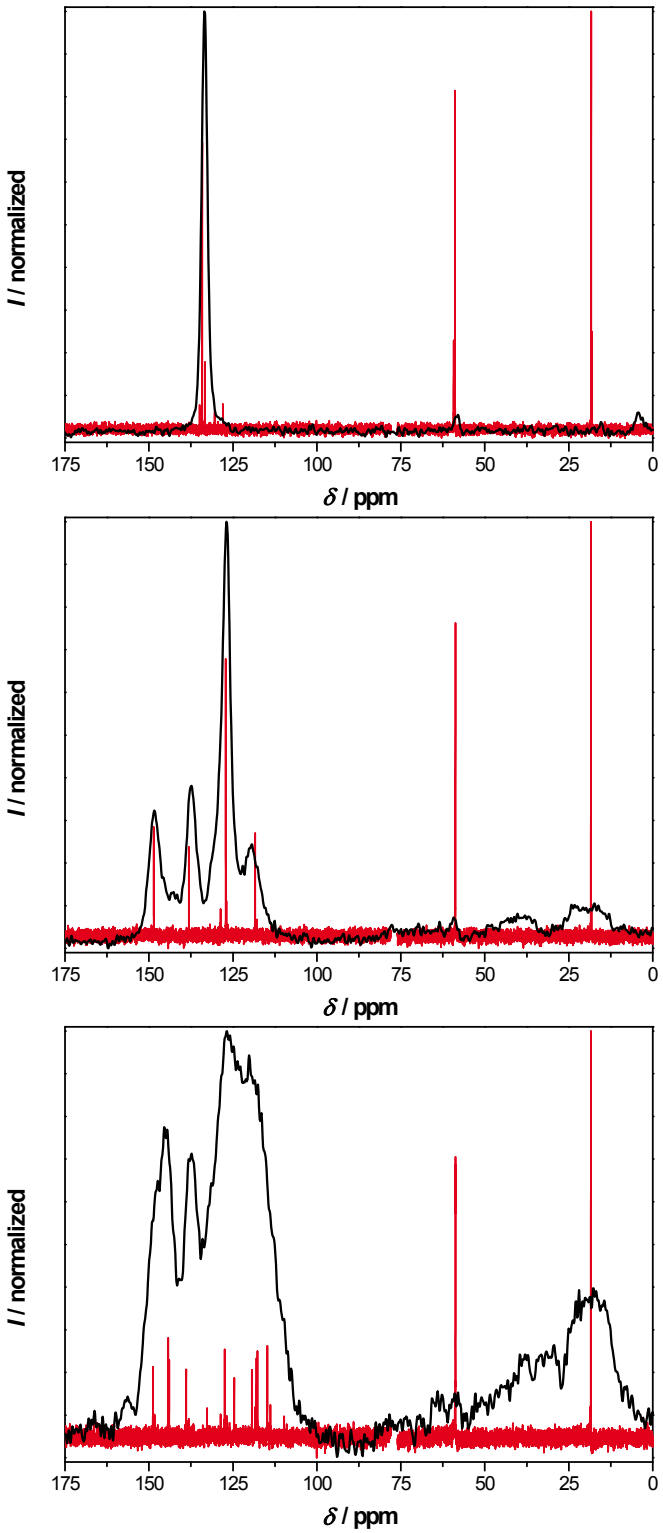

Fig. S4 ^{13}C NMR spectra of the different inverse opal structured organosilica materials (black curves, solid state after surfactant extraction) and of the precursors (red curves, liquid state, measured in $CDCl_3$: $\delta \approx 77$ ppm, the $CDCl_3$-signal was not displayed). Inverse opal phenylene-bridged material (top), inverse opal divinylbenzene-bridged material (center), inverse opal divinylaniline-bridged material (bottom).