**Supporting Information:**

**Mesopore etching under supercritical conditions ‒ a shortcut to hierarchically porous silica monoliths**

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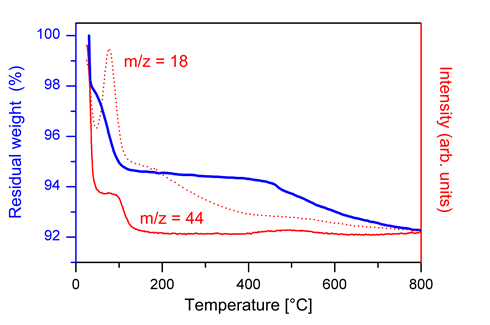
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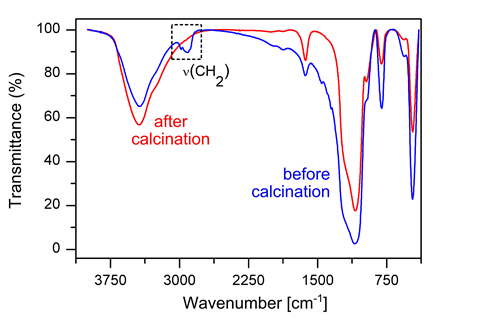
*E-mail address:* [tallarek@staff.uni-marburg.de](mailto:tallarek@staff.uni-marburg.de) (U. Tallarek).

*URL:* http://www.uni-marburg.de/fb15/ag-tallarek.

**Figure S1.** TGA−MS (blue line) of sample 4, carried out after the SCEWA step. H2O (dotted red line) and CO2 (solid red line) were detected as drying and decomposition products, respectively.



**Figure S2.** FT-IR spectra of sample 4, acquired after the SCEWA step (blue) and after calcination at 550°C (red). The bands at 3000–2800 cm–1, which represent symmetric and asymmetric stretch vibrations of PEG methylene groups, disappear after the short calcination step (5h).



**Figure S3.** Nitrogen sorption isotherms (left) and the corresponding pore size distributions (center) derived from NLDFT analysis of the adsorption branch, together with MIP-derived pore size distributions (right) for sample 4, acquired after the SCEWA step (blue) and after calcination at 550°C (red).

