Supporting Information

The silica monolith exhibits a type IV(a) isotherm with H1 hysteresis.[1] The pore size distribution shows a maximum around 30.6 nm (see Fig. 1).

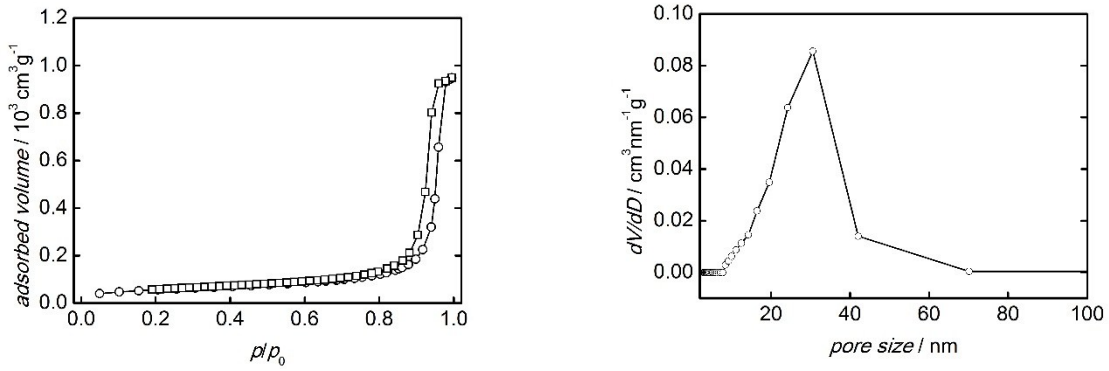

Figure 1: Nitrogen physisorption (left) and BJH pore size distribution from the desorption branch (right) for the synthesized silica monolith.

The mercury porosimetry measurement (Fig. 2) reveals the mesopores distribution that was already observed by nitrogen physisorption as well as a broad distribution of macropores up to about 5.5 µm.

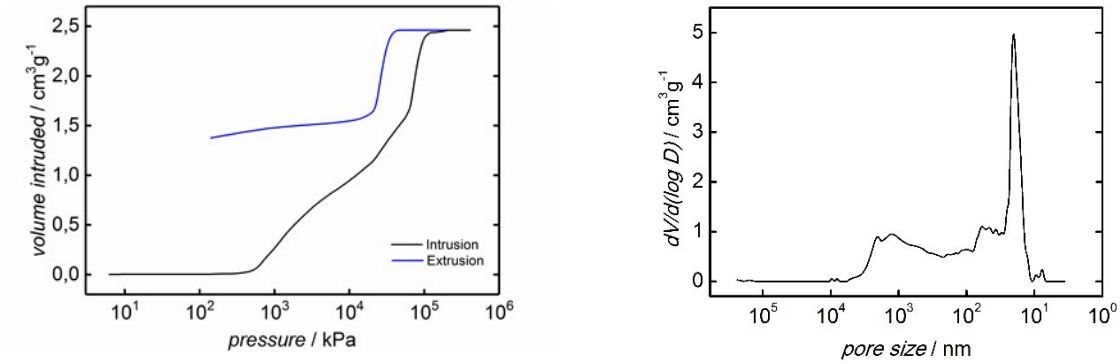

Figure 2: Mercury porosimetry intrusion/extrusion (left) and smoothed pore size distribution (right) of the synthesized silica monolith.

Further characterization details can be found in recent literature. [2,3]

To determine the threshold (onset) concentration for a measurable sensor reaction of our material an In_2O_3 monolith was carefully grinded and the resulting powder was utilized to prepare a thin sensing layer. As can be seen from the figure 3 below, this sensor shows a reasonable response for ozone concentrations higher than 50 ppb.

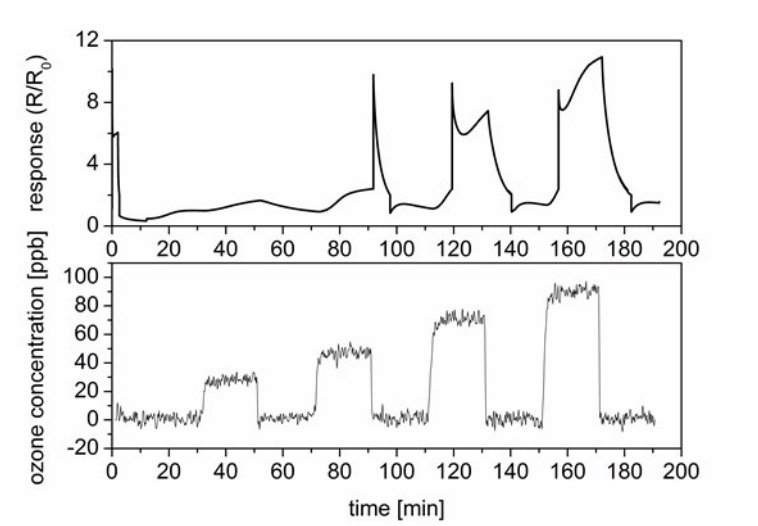

Figure 3: Determination of onset concentration of In_2O_3 monolith material for ozone. Response vs. time of a grinded In_2O_3 monolith (top) and measured concentration of ozone (bottom).

References

1 M. Thommes, K. Kaneko, A. V. Neimark, J. P. Olivier, F. Rodriguez-Reinoso, J. Rouquerol and K. S. Sing, *Pure and Applied Chemistry*, 2015, **87**.

2 K. Nakanishi, *Journal of Porous Materials*, 1997, **4**, 67–112.

3 J.-H. Smått, S. Schunk and M. Lindén, *Chemistry of Materials*, 2003, **15**, 2354–2361.