

1

2 **A carbon nanopore model to quantify**
3 **structure and kinetics of ion electrosorption with**
4 **in situ small angle X-ray scattering**

5

6

7 C. Prehal, C. Koczwara, N. Jäckel,
8 H. Amenitsch, V. Presser, O. Paris

9

10

11

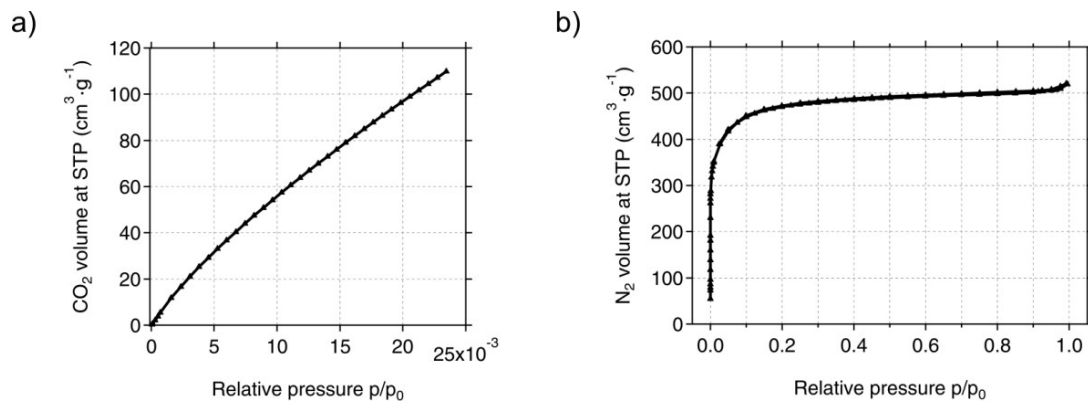
12

13

14 **Electronic Supplementary Information**

15

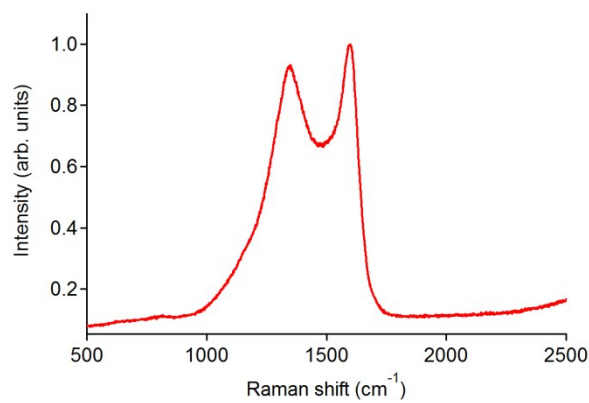
1 Sorption Isotherms



2

3 **Supplementary Figure 1:** Carbon dioxide isotherms (a) and nitrogen isotherms(b) carried out at 273 K
4 and 77 K, respectively,.

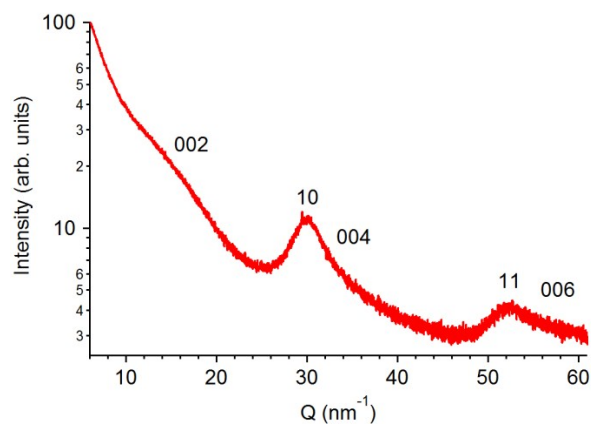
5 Raman scattering



6

7 **Supplementary Figure 2:** Raman spectrum recorded at 532 nm.

8 X-ray diffraction



9

10 **Supplementary Figure 3:** X-ray diffraction profile (scattering intensity vs. scattering vector length Q).