Supporting Information Section for

Gas Sensing with Au-Decorated Carbon Nanotubes.

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Full response of the sensors to NO_2. Full response to NO_2 of sensors based on oxygen-plasma treated MWNTs (Fig. S1, O_2 – MWNTs) and sensors based on MWNTs which, after the oxygen plasma treatment, have been decorated with 5Å Au (Fig. S2, Au(5Å) –MWNTs). The zoom of Fig. S2 on the initial part of the response and final part of the recovery is shown in Fig. S3.

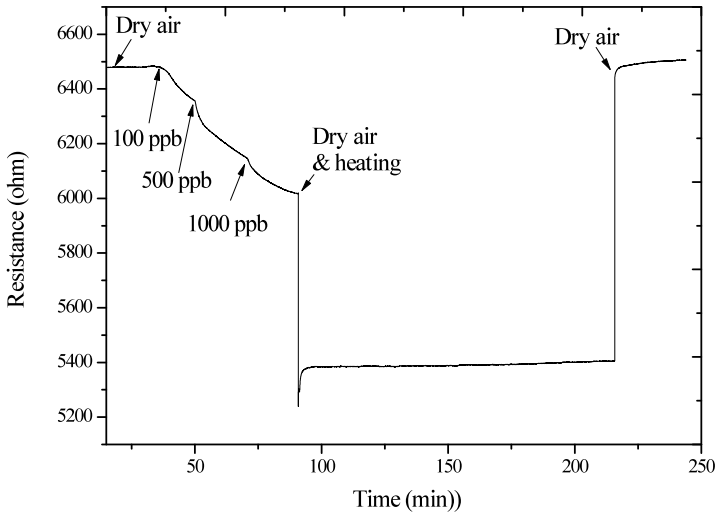

Figure S1. Response towards increasing concentration of NO_2 (initial part of the sensor response curve) and subsequent baseline recovery (final part of the curve) of an oxygen plasma treated CNT sensor (O_2 – MWNTs). Baseline recovery consists of flushing the sensor with dry air and heating the active films at 150ºC for promoting desorption of gas molecules. The sensor regains its baseline resistance, once back to room temperature.

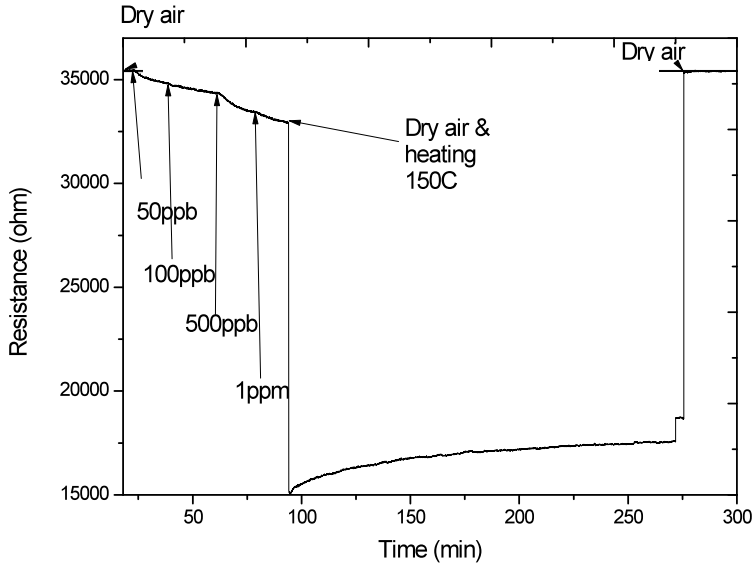

Figure S2. Response towards increasing concentration of NO2 (initial part of the sensor response curve) and subsequent baseline recovery (final part of the curve) of a sensor consisting of MWNTs which, after the oxygen plasma treatment, have been decorated with 5Å Au (Au(5Å) – MWNTs). The recovery procedure is described in the caption of Figure S1.

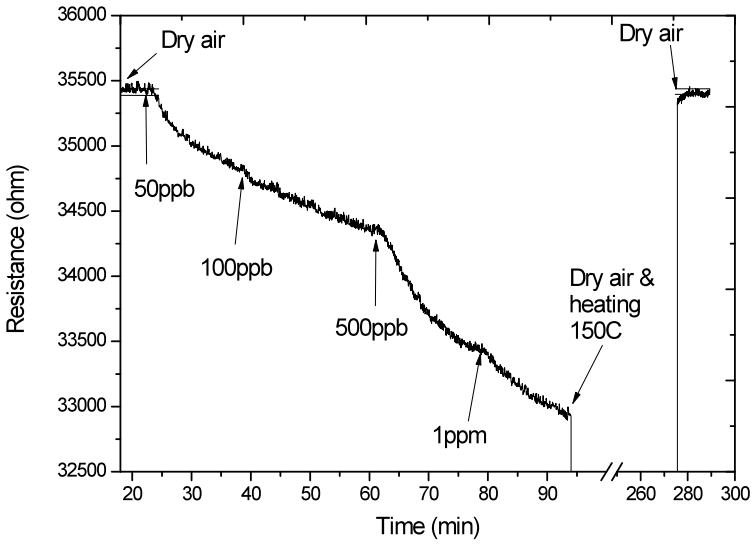

Figure S3. Zoom of Fig. S2 on the initial part of the response and final part of the recovery. Fig, S2 is cut in order to improve readability of the sensor response towards increasing concentration of NO_2. This figure is analogous to figure 2 of the paper.