Supporting Information

In situ Growing Double-layer TiO_2 Nanorod Arrays on New-type FTO Electrode for Low-concentration NH_3 Detection at Room temperature

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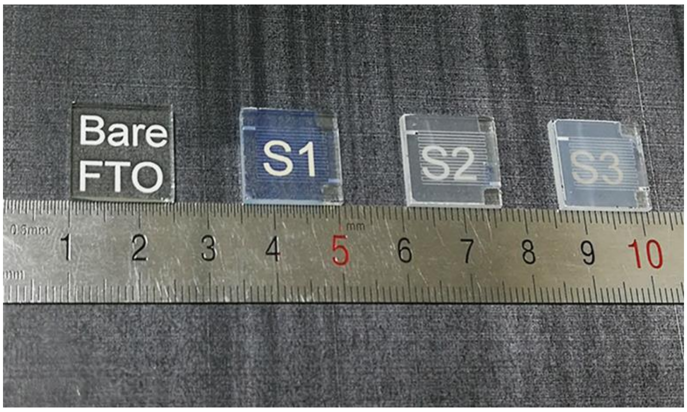

Fig. S1 Real photographs of each fabricated sensors.

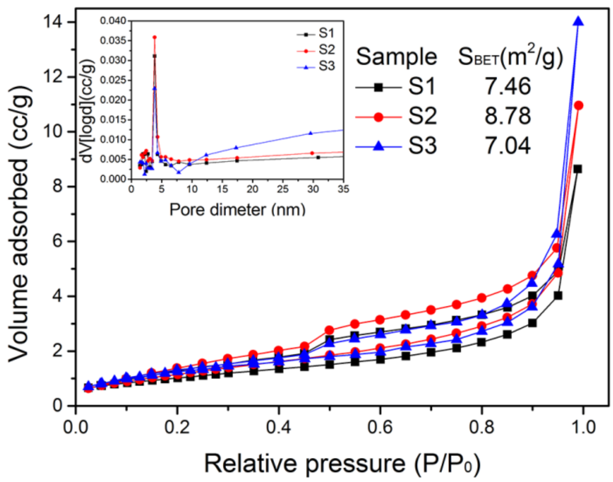

Figure S2. N_2 adsorption-desorption isotherms and pore size distribution curves (inset) of S1, S2 and S3.

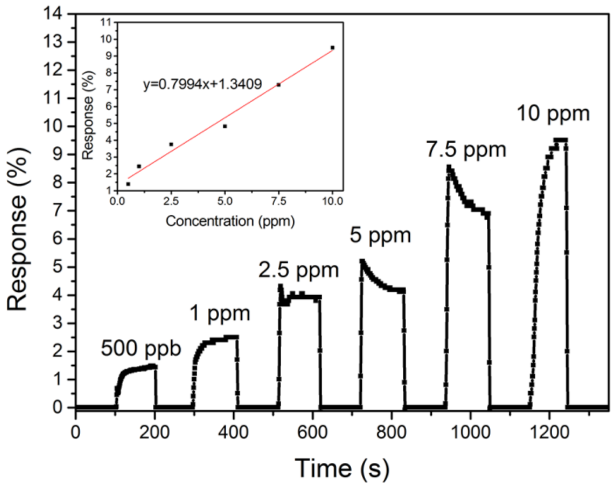

Fig. S3. The gas sensing curve of S2 to different-concentration NH_3 from 0.5 to 10 ppm in 50% RH air at room temperature. The insets is the concentration vs response curve.

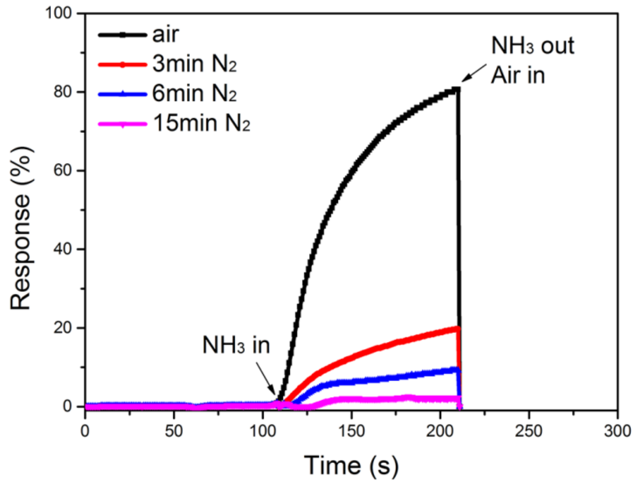

Fig. S4 Sensing curve of TiO_2 NRs for 100 ppm NH_3 under different N_2 flushing times at room temperature.

Herein, we control the time of N_2 flushing to reduce the oxygen concentration of the ambient gas, so as to qualitatively study the effect of oxygen concentration on NH3 sensing. Since we use a static gas distribution system and the background gas in the recovery phase changes from N_2/air mixture to air, the response characteristics of the sensor will not be discussed here.