SUPORTING INFORMATION

Aerosol assisted chemical vapour deposition of gas sensitive SnO₂ and Au-functionalised SnO₂ nanorods via a non-catalysed vapour solid (VS) mechanism

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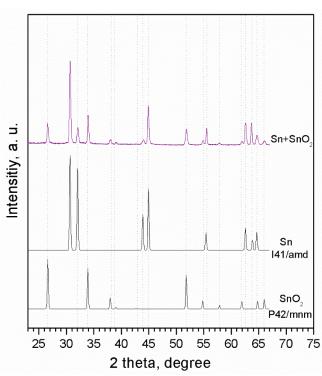
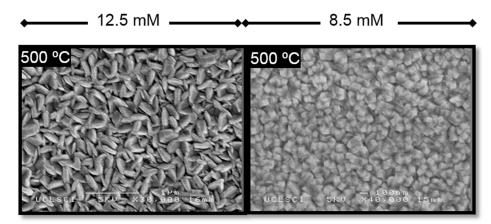


Figure S1. Typical XRD pattern of the aerosol assisted chemical vapor deposited films at 600 °C from methanol-based solution. The diffraction peaks in the data can be indexed to a tetragonal phase (P42/mnm) of tin oxide (ICCD card no. 041-1445) and a body-centered tetragonal phase (I41/amd) of metallic tin (ICCD card no. 004-0673)



20 **Figure S2.** SEM imaging of the films deposited at 500 C from a methanol-based solution with different precursor concetration.

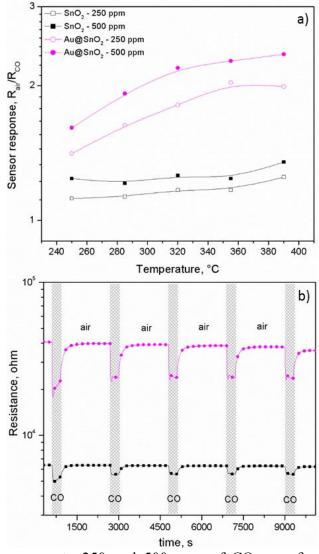


Figure S3. Sensor responses to 250 and 500 ppm of CO as a function of the operating temperature (a) and film-resistance changes towards 500 ppm of CO at 290 °C (b).

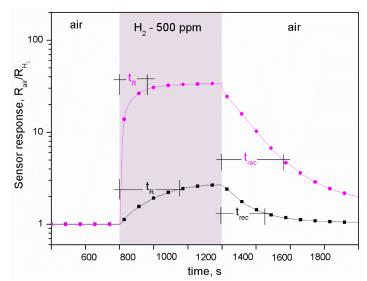


Figure S4. Normalised sensor response for 500 ppm of H_2 (a) and CO (b) measured at 290 °C. t_R and t_{rec} represent the response and recovery time, respectively.

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