

## Supporting Information

### Role of Pd nanoparticles on gas sensing behaviour of Pd@In<sub>2</sub>O<sub>3</sub> yolk-shell nanoreactors

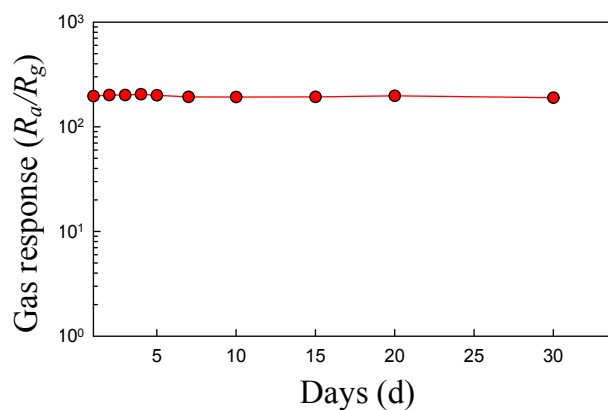
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**Figure S1** Long term stability test of Pd@In<sub>2</sub>O<sub>3</sub> yolk-shell NPs based sensor for 5 ppm of ethanol at 350°C in dry air.



**Figure S2** Response of Pd@In<sub>2</sub>O<sub>3</sub> yolk-shell NPs in (a) dry and (b) RH 80% at 350°C (E: EtOH, C: CO, H: H<sub>2</sub>, F: HCHO, A: NH<sub>3</sub>, N: NO<sub>2</sub>, T: TMA, X: XYL).

