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Supporting Information for

## "Facile Synthesis and High Formaldehyde-sensing Performance of

## NiO-SnO<sub>2</sub> Hybrid Nanospheres"

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S1:



Fig.S1: (a) SEM image of pure porous  $SnO_2$  nanospheres; (b) SEM image of NiO-doped  $SnO_2$  nanospheres.



Fig.S2: Typical nitrogen adsorption–desorption isotherm and BJH pore size distribution plots (inset) of pure porous  $SnO_2$ nanospheres (a) and NiO-doped  $SnO_2$  nanospheres (b).



Fig.S3: The corresponding relationships between the response and the concentrations of formaldehyde at  $100^{\circ}$ C.

S4:



Fig.S4: The electrical resistance of pure porous  $SnO_2$  nanospheres (red) and NiO-doped  $SnO_2$  nanospheres (black) in air at different temperatures.