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Supplementary Information

Striking Sensing Improvement of n-type Oxide Nanowires by Electronic Sensitization Based on Work Function Difference

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Table. S1. Comparison of sensing properties of WO_3-functionalized SnO_2 NWs' with those of WO_3 NWs-based sensors.

Materials	Gas species	Concentration (ppm)	Temperature (^oC)	Response	Reference
WO_3-functionalized SnO_2 nanowires	H_2	1	300	137	This work
Au-modified WO_3 nanorods	H_2	50	200	6.6	1
Pt-functionalized WO_3 nanorods	ethanol	200	220	7	2
Au-functionalized WO_3 nanoneedles	ethanol	1.5	250	12	3
TiO_2-functionalized WO_3 nanorods	acetone	200	300	7.6	4
In_2O_3-functionalized WO_3 nanoplates	H_2S	10	150	143	5

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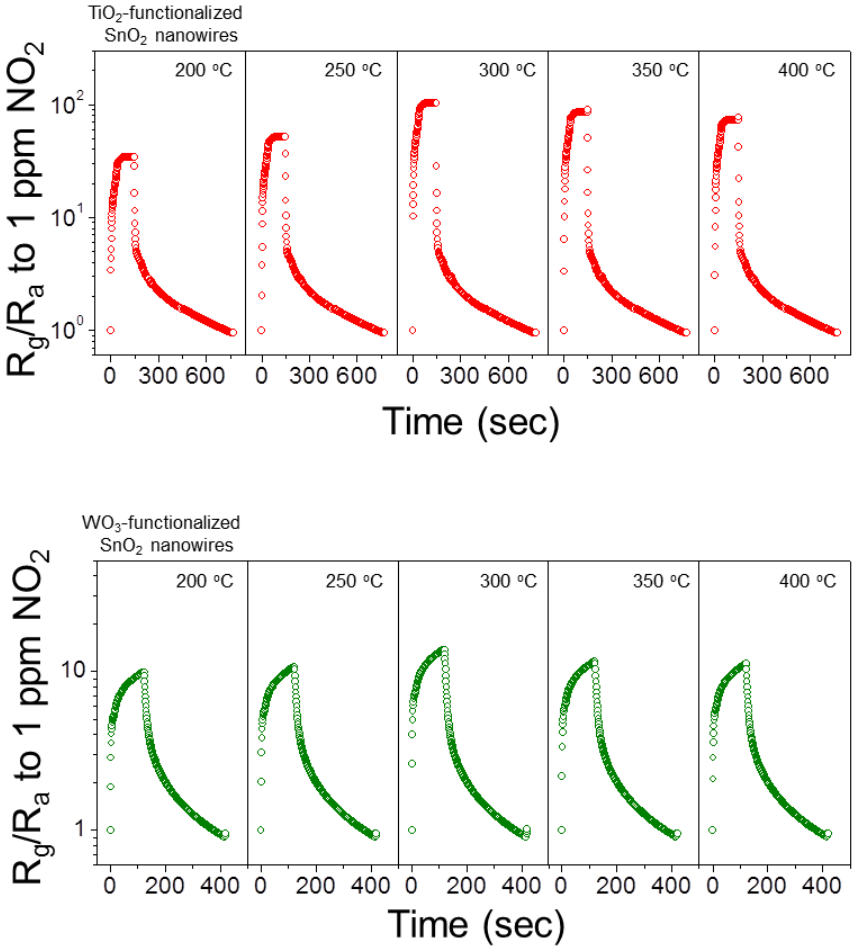

Fig. S1. Response curves of TiO_2- and WO_3-functionalized SnO_2 nanowires, measured at various operating temperatures 200-400 °C in the presence of 1 ppm NO_2.