Enhanced Gas Sensing Performance of CuO-ZnO Composite Nanostructures for Low-Concentration NO_2 Detection

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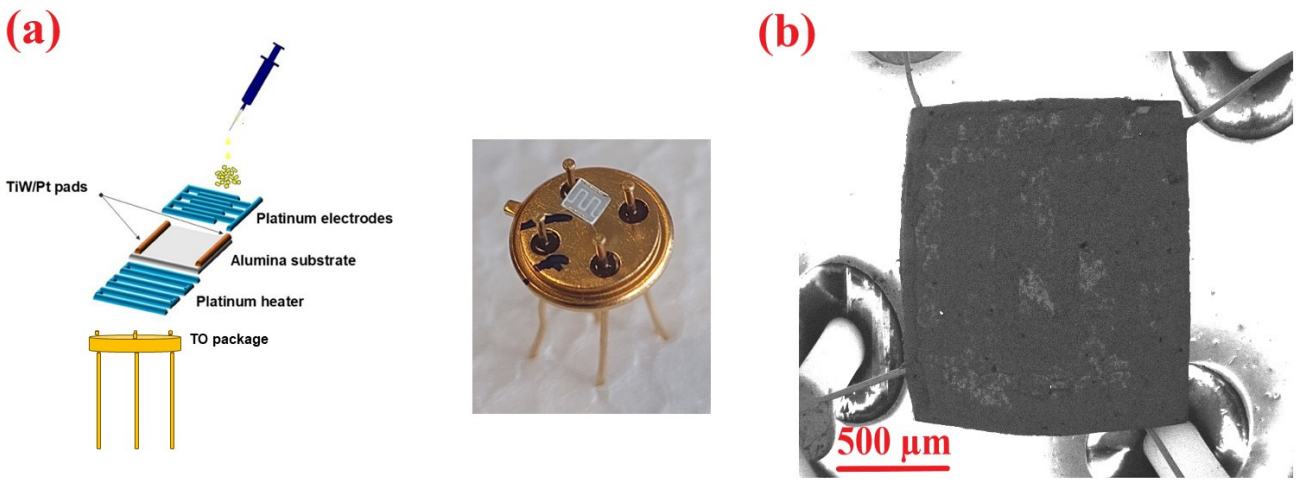

Figure S1. (a) Schematic representation of fabrication of the gas sensor for electrical measurements; (b) SEM image of gas sensing material drop-cast on Pt interdigitated deposited on the Al_2O_3 substrate.

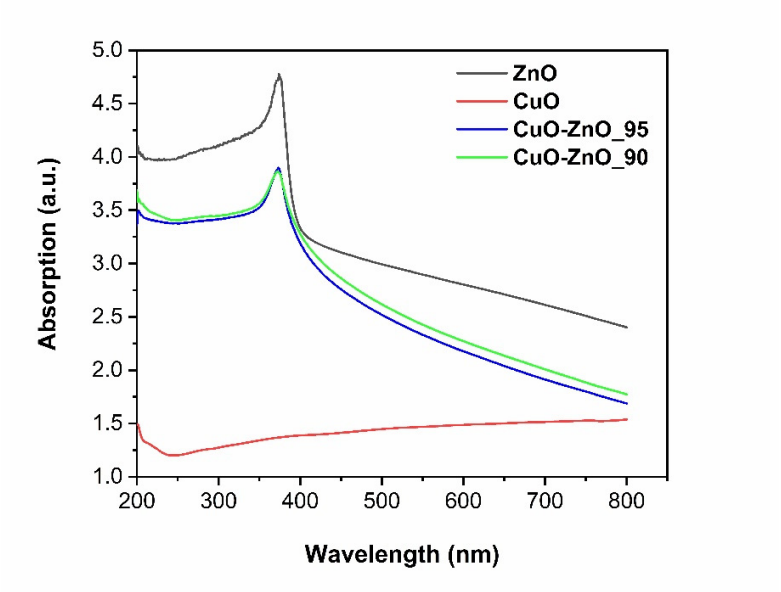

Figure S2. UV-vis absorbance spectra.

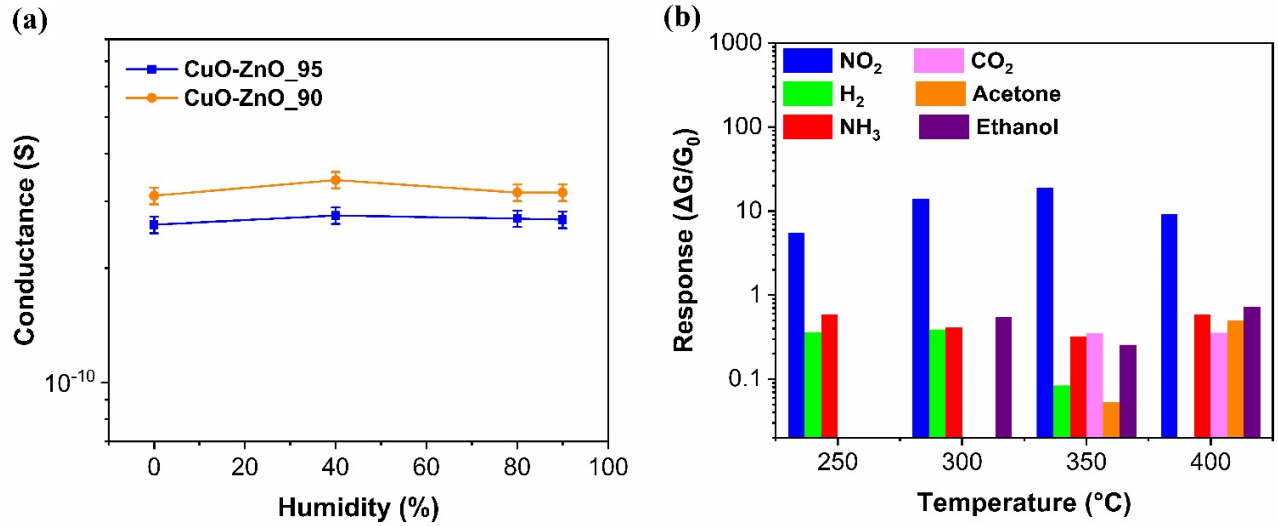

Figure S3. a) Conductance of CuO-ZnO_95 and CuO-ZnO_90 at different relative humidity (0-90%); b) Response of CuO-ZnO_90 toward 1 ppm of NO_2, 100 ppm of H_2, 25 ppm of NH_3, 400 ppm of CO_2, 10 ppm of acetone and 25 ppm of ethanol.

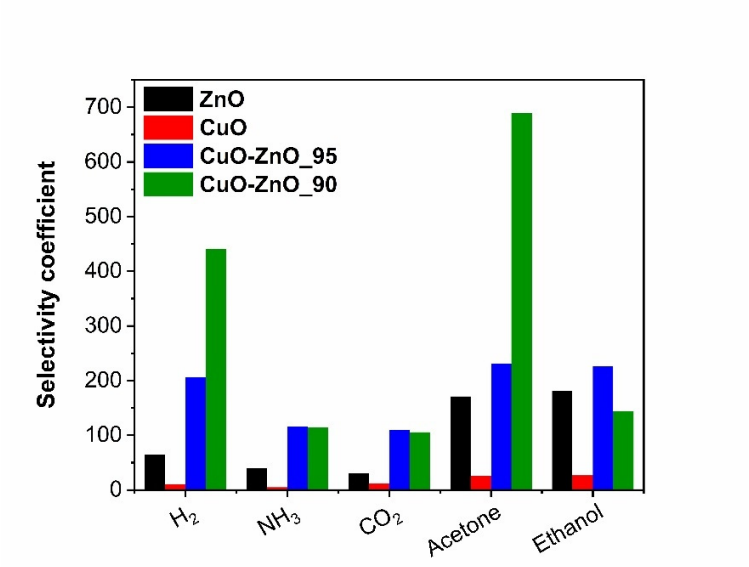

Figure S4 Selectivity coefficient of ZnO, CuO, CuO-ZnO_95 and CuO-ZnO_90 to 5 ppm of NO_2.

Table S1 Response of CuO-ZnO_95 and CuO-ZnO_90 toward various concenteration of NO_2 at 350 °C.

Concentration	Response of CuO-ZnO_95	Response of CuO-ZnO_90
0.1	1.6	1.2
0.2	3.3	2.8
0.5	5.7	4.9
1	18.3	18.9
2	25.3	26.7
5	36.1	37