

Supporting Information

Graphene-wrapped WO₃ nanoparticles with improved performances in electrical conductivity and gas sensing properties

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Electronic Supplementary Information (ESI)

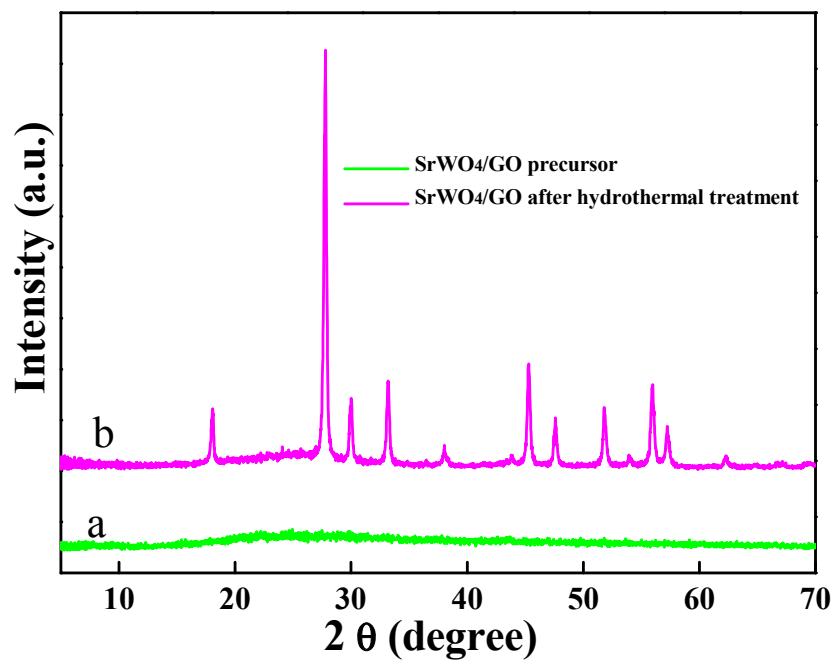


Fig. S1. XRD patterns of as-prepared SrWO₄/GO precursor and SrWO₄/GO after hydrothermal treatment.

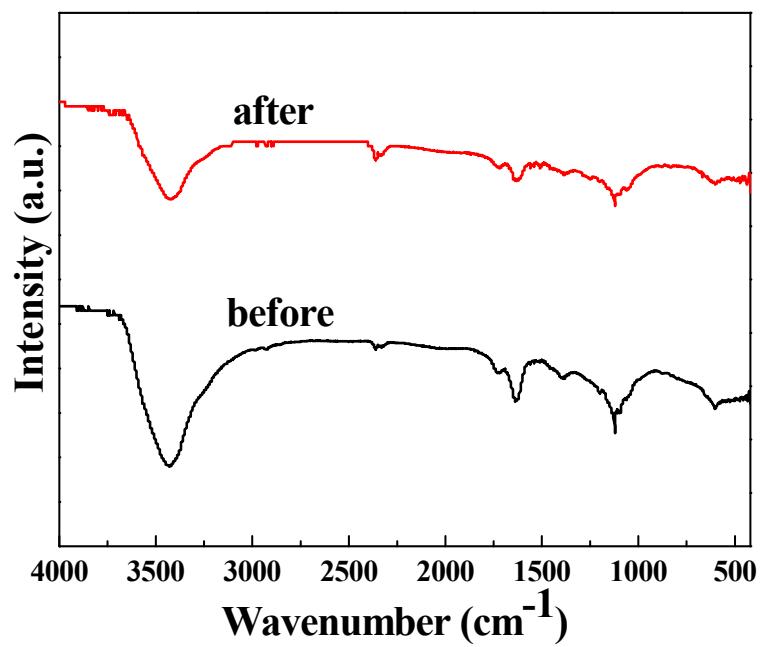


Fig. S2. FTIR spectrum of GO before and after UV irradiation for 5h.

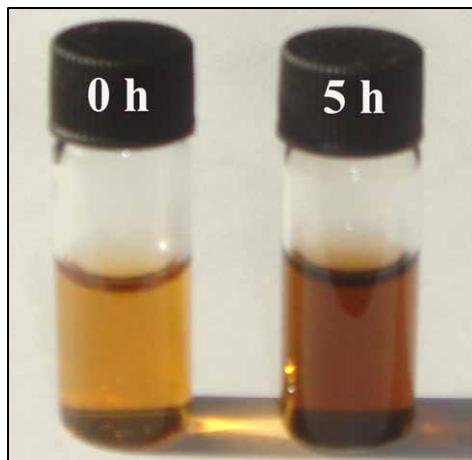


Fig. S3. Color change for GO aqueous solution as a function of UV irradiation time: 0 and 5 h.

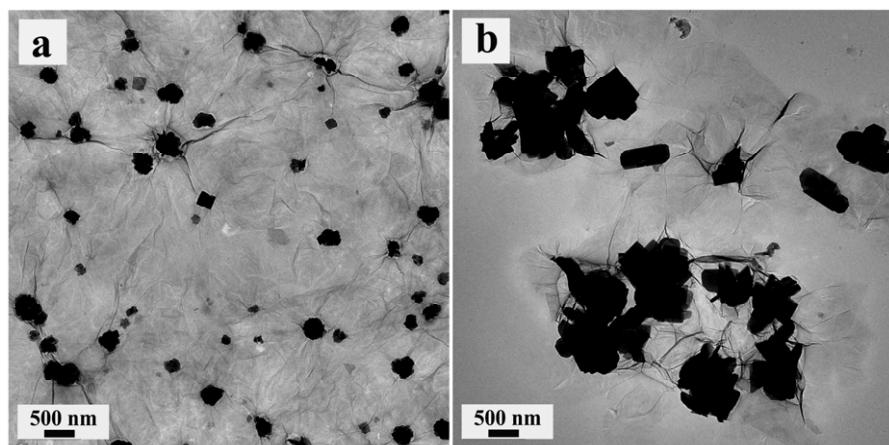


Fig. S4. TEM images of WO_3/GO nanocomposites prepared at different pH values: (a) pH = 1.7; (b) pH = 4.6.

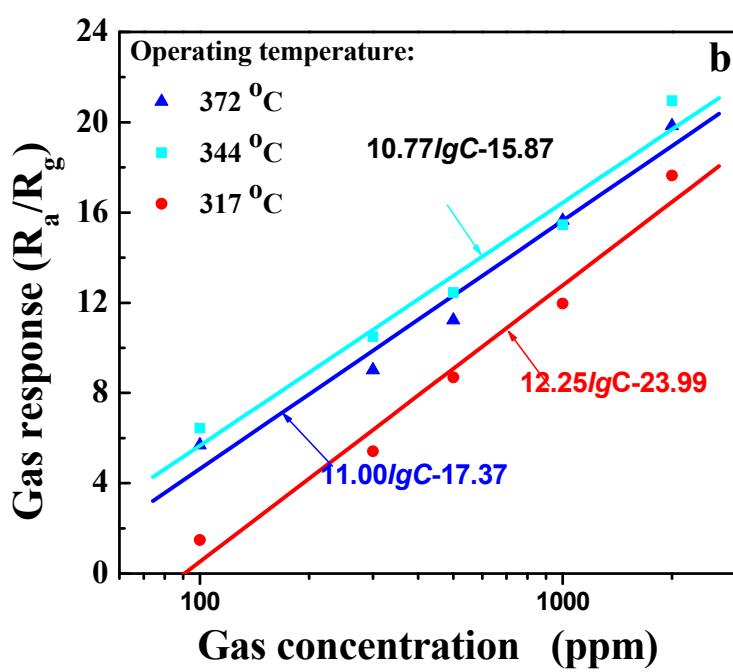
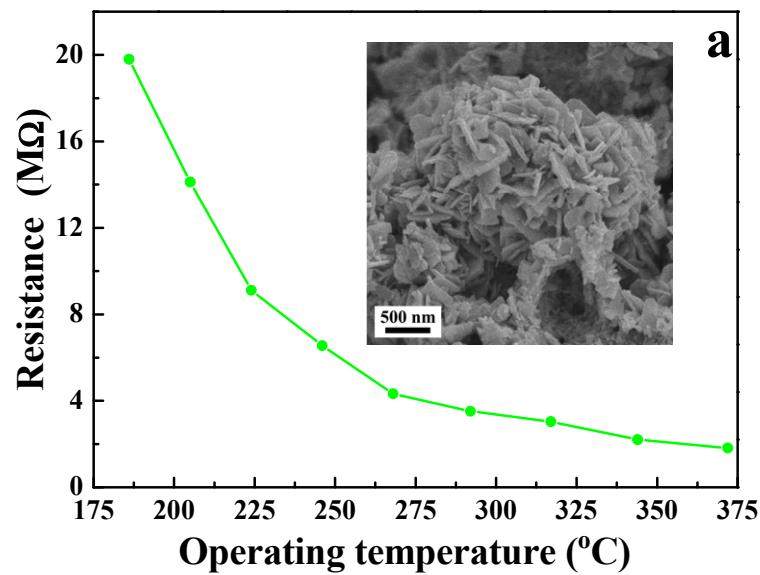


Fig. S5. (a) Relation between the resistance and the operating temperature of WO_3 nanoparticles in the air (The inset is SEM image of WO_3 nanoparticles); (b) The response of the sensor at different concentration of alcohol at 317, 344 and 372 $^{\circ}\text{C}$ of WO_3 nanoparticles.