

Supporting Information

WO₃ Nanoflakes Coupled with Hexagonal Boron Nitride Nanosheets for Triethylamine Sensing

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Table S1. The proportion and position of O species in WO₃ and WO₃/*h*-BN-5 nanocomposite.

O species	WO₃	position (eV)	WO₃/<i>h</i>-BN-5	position (eV)
O_L	75.6%	530.12	67.2%	529.83
O_V	24.3%	531.01	26.3%	531.65
O_C	-	-	6.4%	533.16

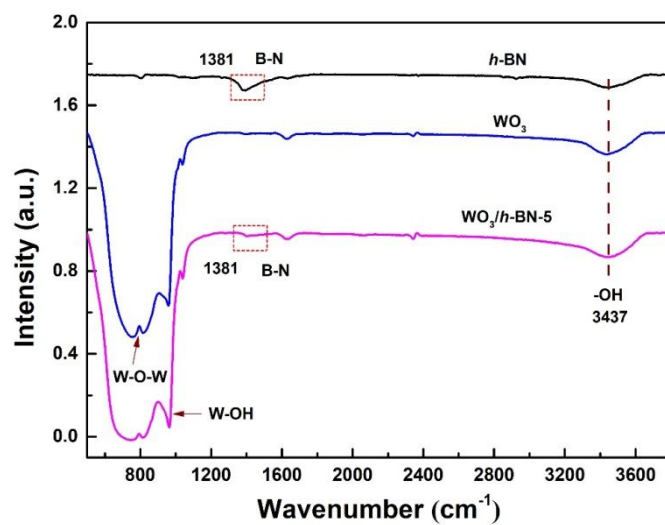


Fig. S1. FT-IR spectrum of single *h*-BN, WO_3 and the $\text{WO}_3/h\text{-BN-5}$ hybrid.

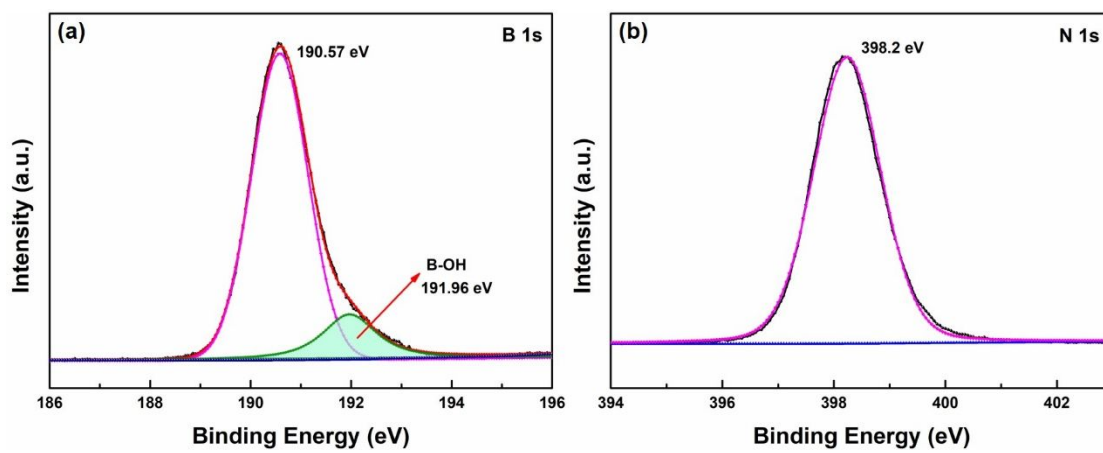


Fig. S2. XPS analysis of B 1s element (a) and N 1s element (b).

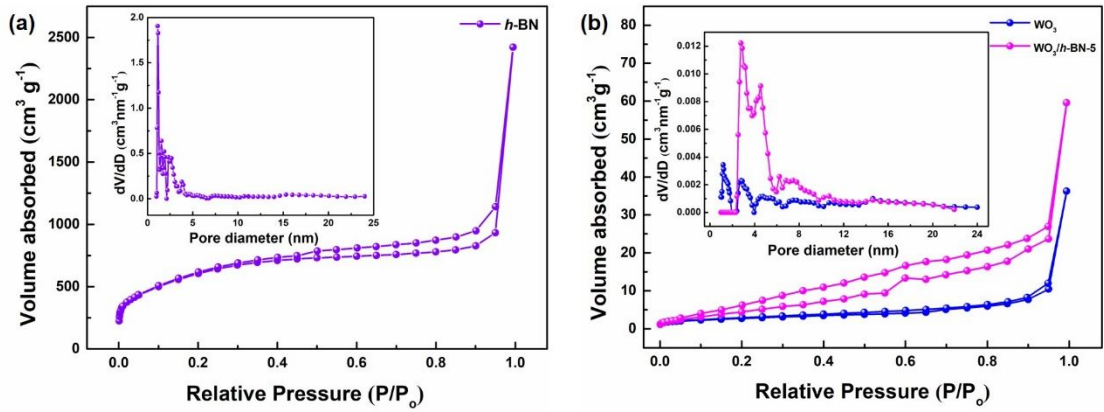


Fig. S3. N₂ adsorption-desorption isotherm and BJH pore size distribution (insert) of *h*-BN (a) and pure WO₃, WO₃/*h*-BN-5 (b).

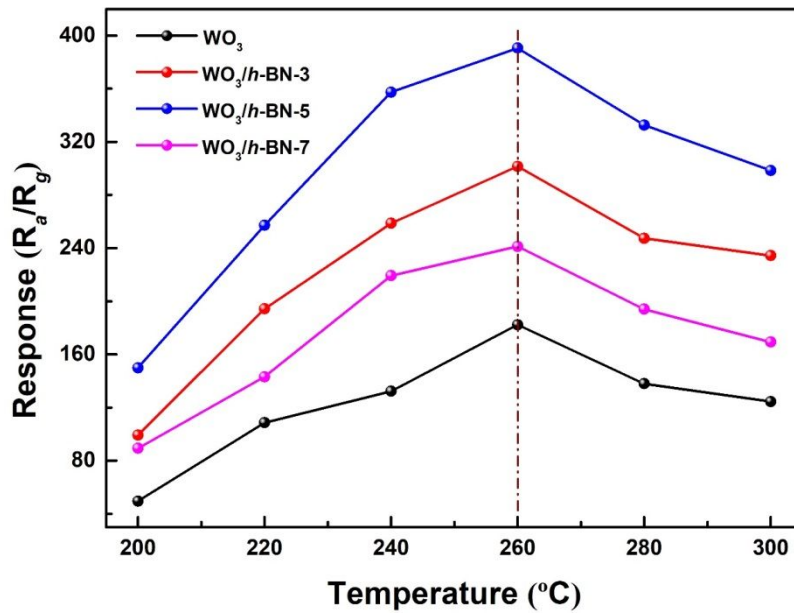


Fig. S4. Temperature-dependent responses of the sensors based on different samples.

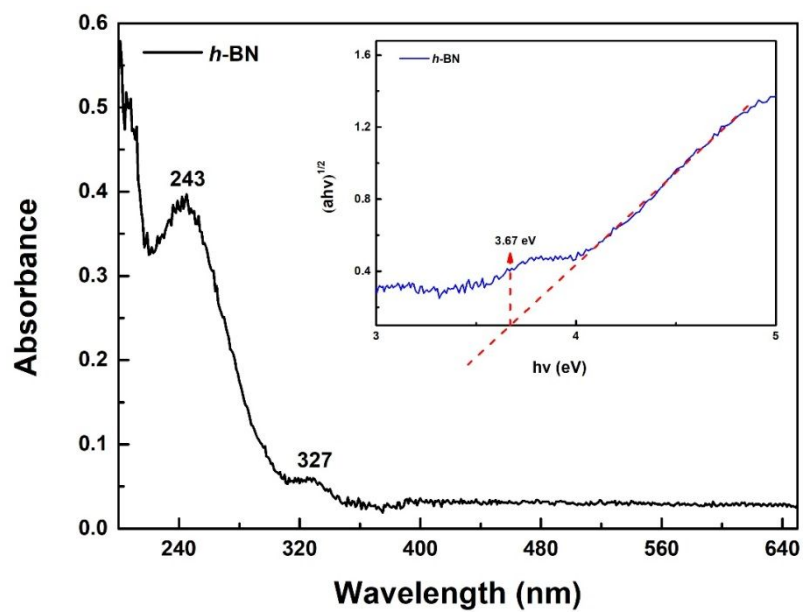


Fig. S5. The UV-vis DRS and $(\alpha h\nu)^{1/2}$ - $h\nu$ plot (inset) of single *h*-BN.