## **Supporting Information**

## Enhanced responsivity and respond speed of SnO<sub>2</sub> visible-blind transparent photodetector via SiO<sub>2</sub> passivation layer

Mingkun Huang <sup>a</sup>, Yue Wang <sup>a</sup>, Lei Yang <sup>a</sup>, Sen Ren <sup>b</sup>, Le Wang <sup>a</sup>, Yuanhao Kang <sup>a</sup>, Niumiao Zhang <sup>a</sup>\*

<sup>&</sup>lt;sup>b</sup> Laboratory of Thin Film Techniques and Optical Test, Xi'an Technological University, Xi'an 710032, China

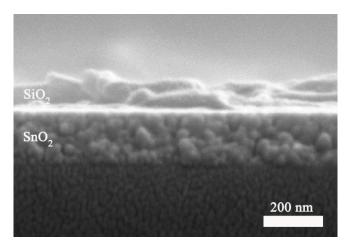


Fig. S1 Cross-sectional SEM images of SnO<sub>2</sub>/SiO<sub>2</sub> composite structures.

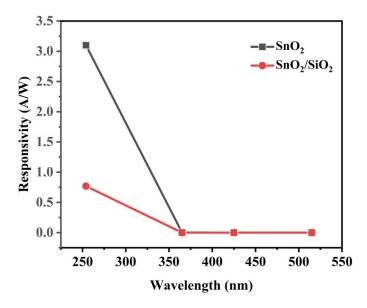


Fig. S2 Responsivity curves of the two different devices measured at a bias of -5 V.

<sup>&</sup>lt;sup>a</sup> Institute of Photonics & Photon-Technology and School of Physics, Northwest University, Xi'an 710069, China