*Supporting Information for*

# Highly Crystalline Ti-doped $SnO_2$ Hollow Structured Photocatalyst with Enhanced Photocatalytic Activity for Degradation of Organic Dyes

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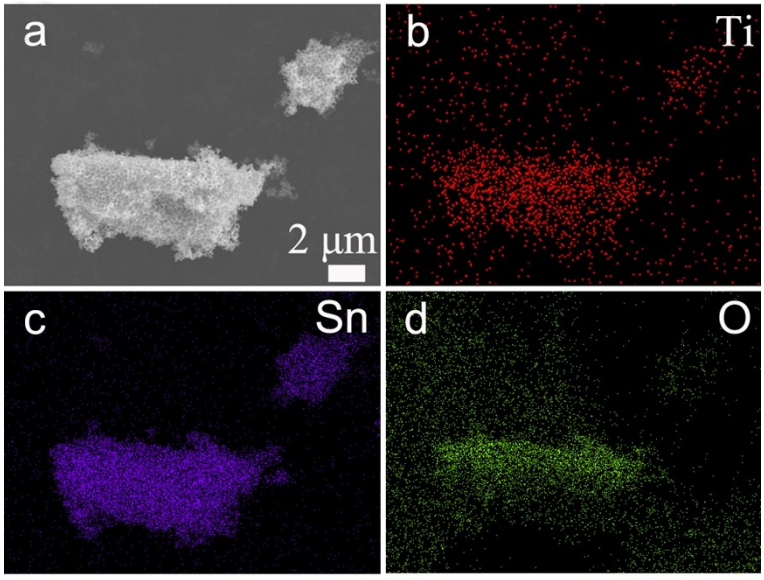


**Fig. S1** (a) SEM image of 20%Ti-doped $SnO_2$. (b) (c) (d) Ti, Sn, O elemental mapping images of 20%Ti-doped $SnO_2$.

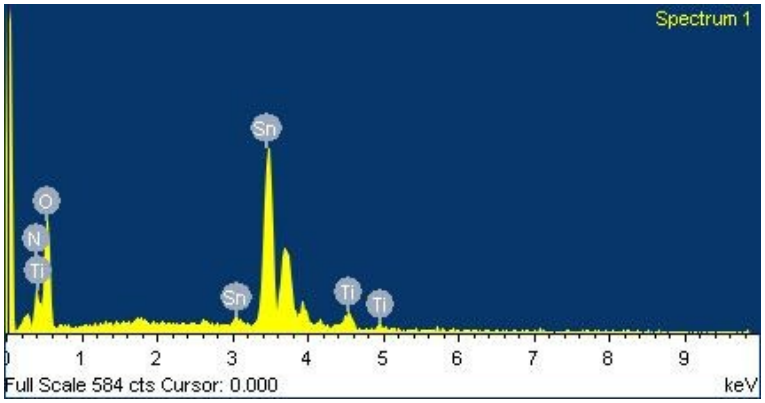


**Fig. S2** A typical EDS spectrum for the 20%Ti-doped $SnO_2$.

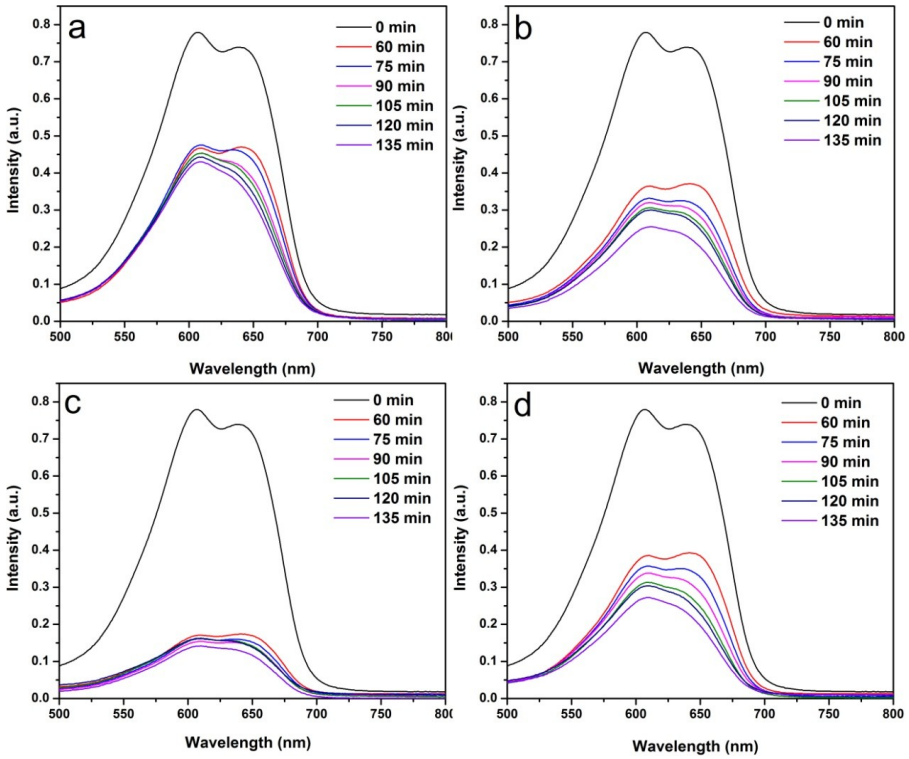


**Fig. S3**Absorption spectrum changes of Methjylene Blue aqueous solution in the presence of the Ti-doped $SnO_2$ samples UV light irradiation (a) $SnO_2$, (b) (c) (d) 10%, 20%, 50%Ti-doped $SnO_2$.

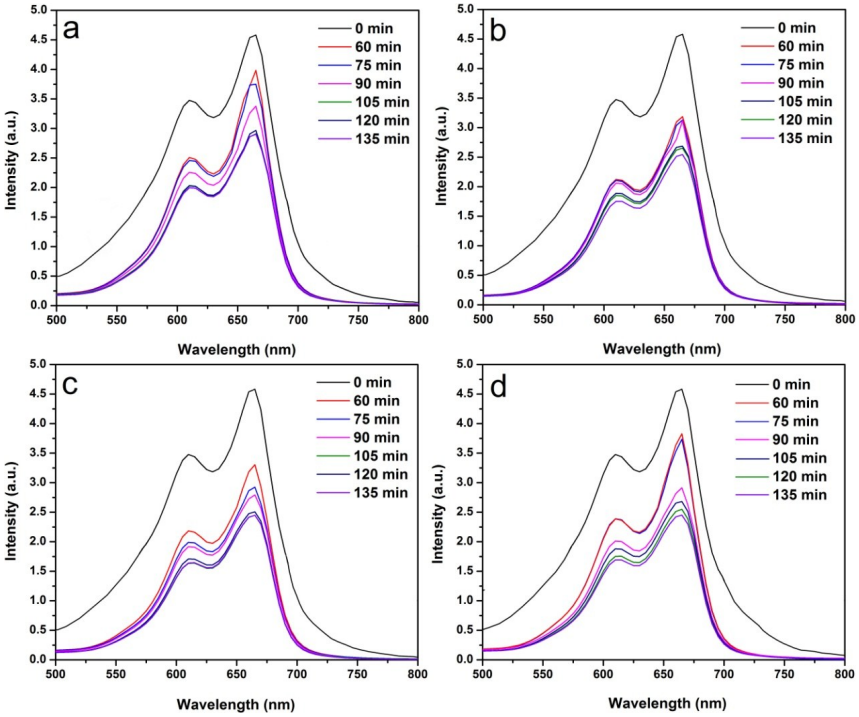


**Fig. S4** Absorption changes of Methjylene Blue aqueous solution in the presence of the Ti-doped $SnO_2$ samples under visible light irradiation. (a) $SnO_2$, (b) (c) (d) 10%, 20%, 50%Ti-doped $SnO_2$.