

Article

# In Situ Construction of a MgSn(OH)<sub>6</sub> Perovskite/SnO<sub>2</sub> Type-II Heterojunction: A Highly Efficient Photocatalyst towards Photodegradation of Tetracycline

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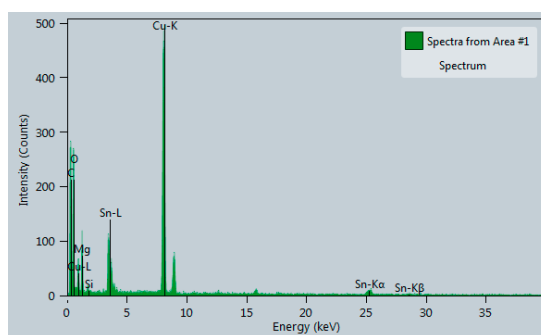


Figure S1. elemental mapping of heterojunction MSOH-SO-3.

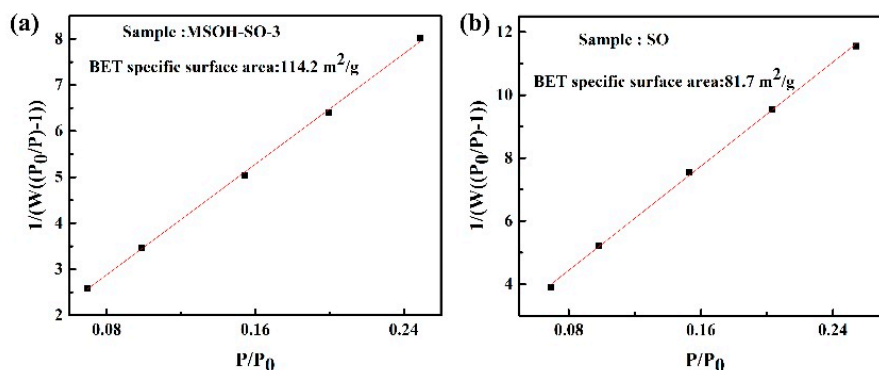
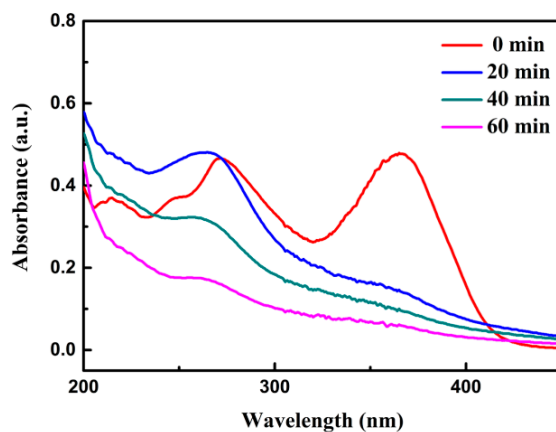
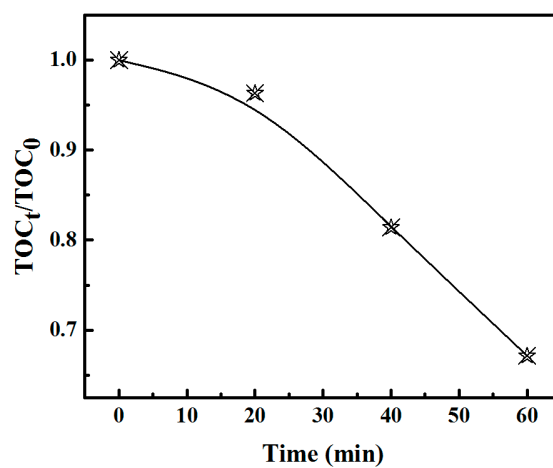


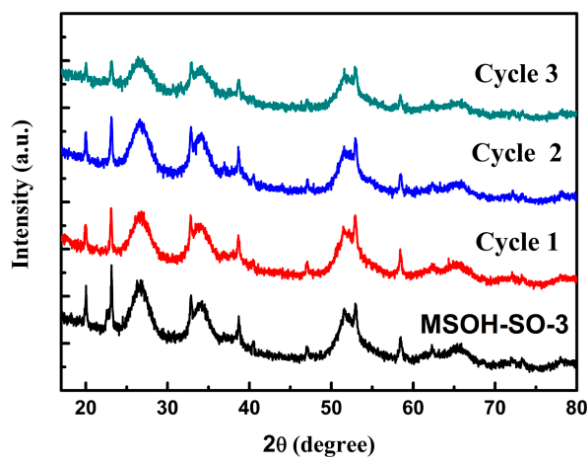
Figure S2. The specific surface area determination performed by BET measurement with N<sub>2</sub> adsorption-desorption. (a) Heterojunction MSOH-SO-3 (b) SnO<sub>2</sub> (SO).



**Figure S3.** UV-visible absorption of TC as a function of irradiation time over the heterojunction MSOH-SO-3.



**Figure S4.** The TOC degradation of TC solution under different UV-light irradiation. ( $TOC_0$ : initial TOC value;  $TOC_t$ : TOC value at photodegradation time  $t$ ).



**Figure S5.** XRD patterns of sample MSOH-SO-3 of cycling runs on the photocatalytic reaction of degrading TC solution.

