

Supporting information

Sn⁴⁺ and S²⁻ co-doped N-TiO_{2-x} nanoparticles for simultaneously efficient photocatalytic removal of multi-contaminants

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¹These authors all have outstanding contributions and should be considered co-first authors.

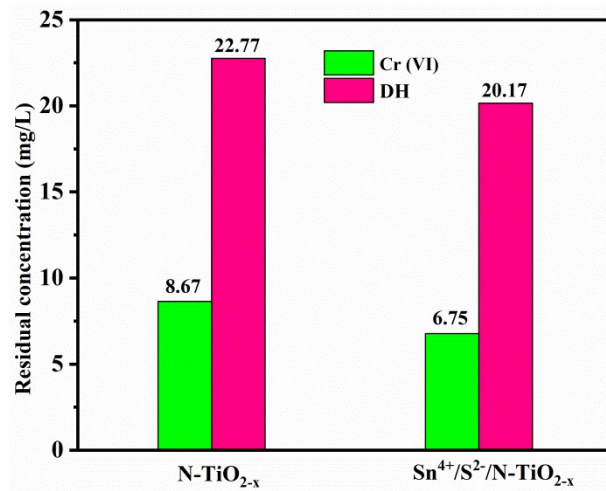


Figure S1. Adsorption toward Cr (VI) with initial concentration of 10 mg/L and tetracycline with initial concentration of 25 mg/L.

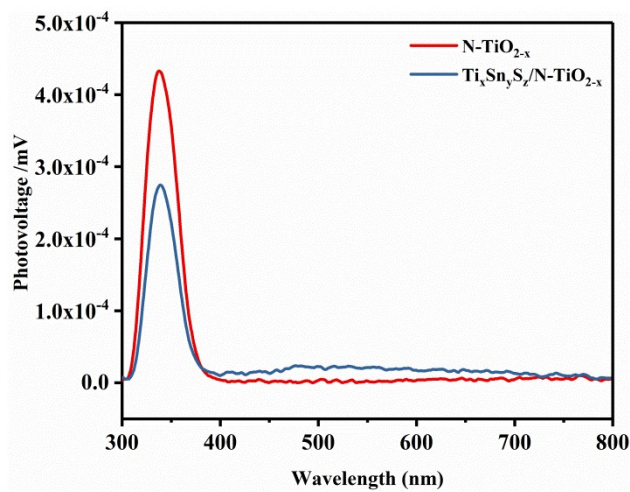


Figure S2. SPV response spectra of N-TiO_{2-x} and Sn⁴⁺/S²⁻/N-TiO_{2-x}.

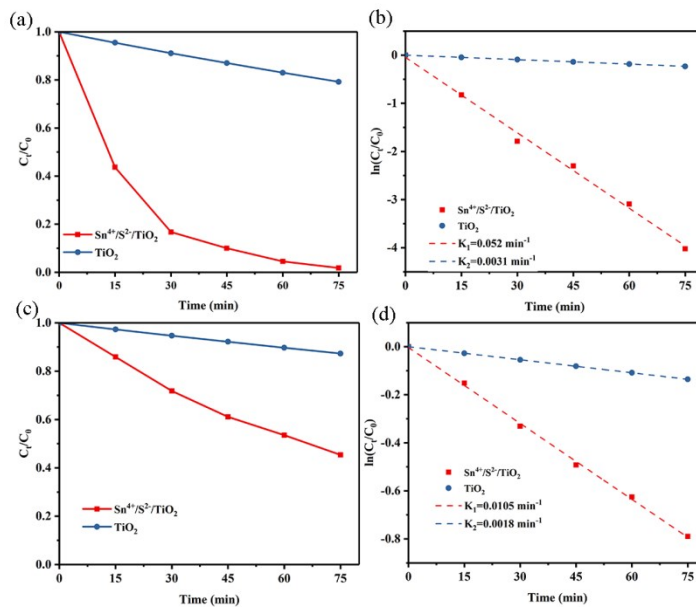


Figure S3. Photoreduction of Cr (VI) and the kinetics curves of Cr (VI)(a, b) of $\text{Sn}^{4+}/\text{S}^{2-}/\text{TiO}_2$ and TiO_2 ; photocatalytic degradation of DH and the kinetics curves of DH (c, d) of $\text{Sn}^{4+}/\text{S}^{2-}/\text{TiO}_2$ and TiO_2 .

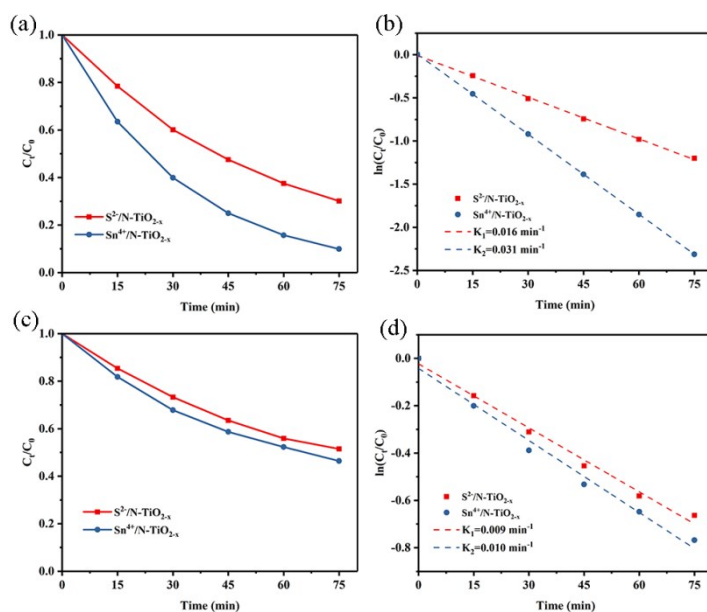


Figure S4. Photoreduction of Cr (VI) and the kinetics curves of Cr (VI)(a, b) of $\text{Sn}^{4+}/\text{N-TiO}_{2-x}$ and $\text{S}^{2-}/\text{N-TiO}_{2-x}$; photocatalytic degradation of DH and the kinetics curves of DH (c, d) of $\text{Sn}^{4+}/\text{N-TiO}_{2-x}$ and $\text{S}^{2-}/\text{N-TiO}_{2-x}$.

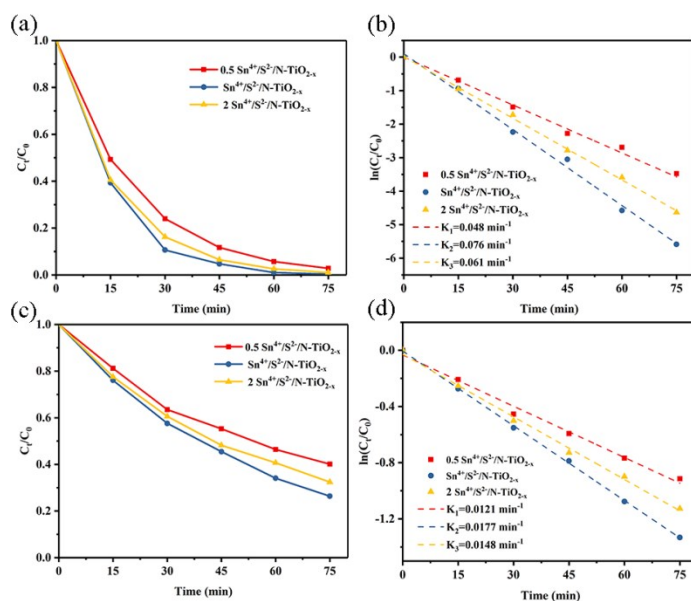


Figure S5. Photoreduction of Cr (VI) and the kinetics curves of Cr (VI)(a, b) of $0.5 \text{ Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$, $\text{Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$ and $2 \text{ Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$; photocatalytic degradation of DH and the kinetics curves of DH (c, d) of $0.5 \text{ Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$, $\text{Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$ and $2 \text{ Sn}^{4+}/\text{S}^{2-}/\text{N-TiO}_{2-x}$.