

Supporting Information

A sustainable approach for spent V₂O₅-WO₃/TiO₂ catalysts management: Selective recovery of heavy metal vanadium and production of value-added WO₃-TiO₂ photocatalysts

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Table S1. Chemical compositions (wt. %) of the regenerated $\text{WO}_3\text{-TiO}_2$ photocatalysts (XRF analysis).

TiO ₂	WO ₃	SiO ₂	CaO	V ₂ O ₅	SO ₃	Al ₂ O ₃	others
93.21	5.26	0.57	0.08	0	0	0.13	0.75

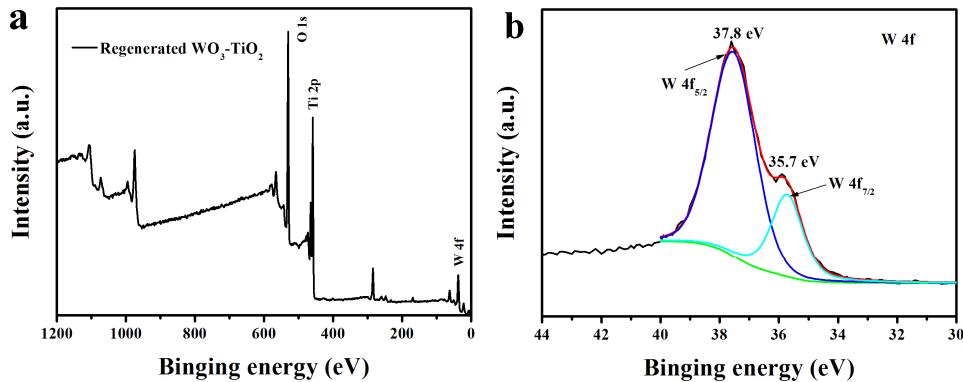


Fig. S1. (a) XPS survey spectra of regenerated $\text{WO}_3\text{/TiO}_2$ photocatalysts, and (b) W 4f spectrum of regenerated $\text{WO}_3\text{/TiO}_2$ photocatalysts.

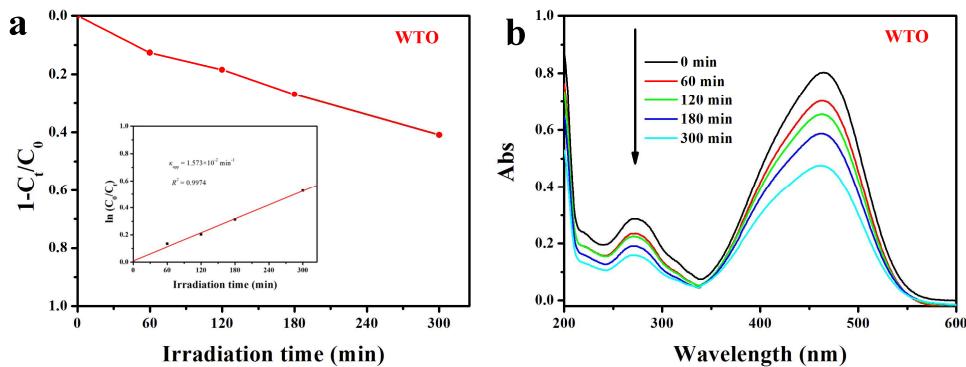


Fig. S2. (a) Photodegradation of MO with $\text{WO}_3\text{-TiO}_2$ photocatalysts (WTO) which prepared via sol-gel method (inset is photocatalytic reaction kinetics), and (b) spectral changes of MO in the presence WTO.