## **Supplementary Material**

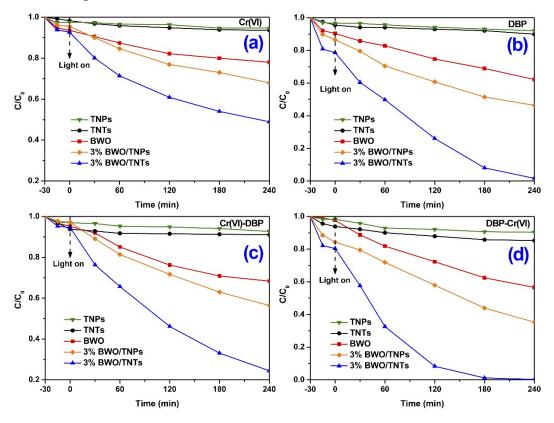
## Simultaneous Removal of Heavy Metals and Organic Contaminants over Bi<sub>2</sub>WO<sub>6</sub>/Mesoporous TiO<sub>2</sub> Nanotube Composite Photocatalyst

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**Details of experimental section** 



**Fig. S1.** Photocatalytic removal of (a) Cr(VI), (b) DBP from only single pollutant solutions and (c) Cr(VI), (d) DBP from Cr(VI)-DBP mixed solution on the catalysts with different morphology under visible light irradiation..

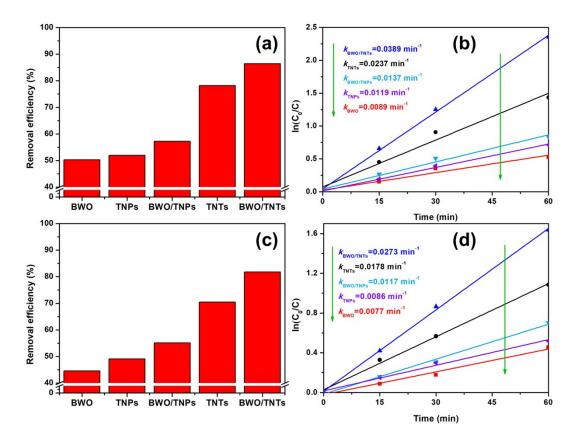
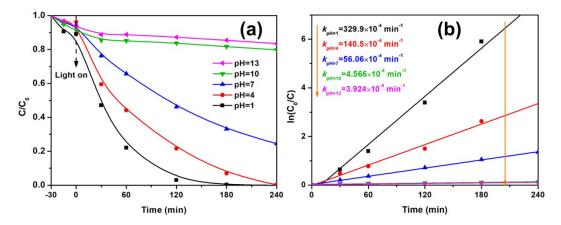


Fig. S2. Removal efficiency and linear fit log plots of Cr(VI) (a, b) and DBP (c,

d) from mixed pollutants on different catalysts under UV light irradiation.



**Fig. S3.** Removal of Cr(VI) on 3%BWO/TNTs from mixed pollutants (a) and linear fit log plots (b).

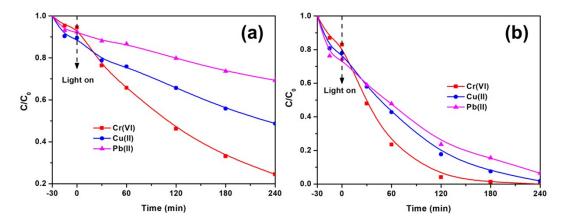
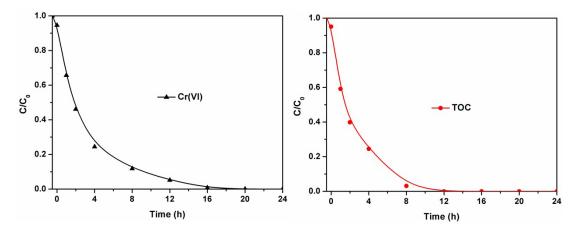


Fig. S4. Removal of (a) heavy metals and (b) DBP on 3%BWO/TNTs from different mixed pollutants.



**Fig. S5.** Removal of (a) Cr(VI) and (b) TOC from Cr(VI)-DBP mixed pollutants on 3%BWO/TNTs under visible light irradiation.

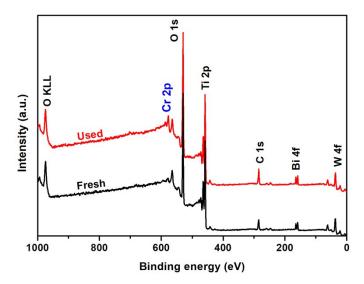
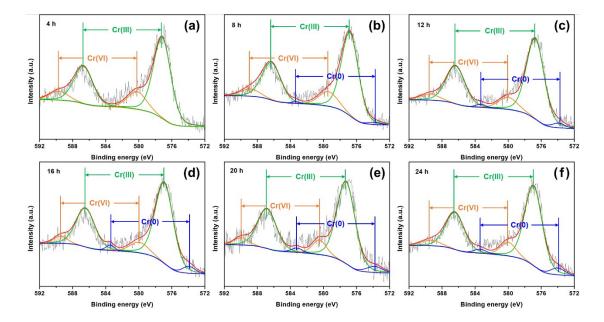


Fig. S6. Survey XPS spectra of the fresh and the used 3%BWO/TNTs.



**Fig. S7.** High-resolution XPS spectra of Cr 2p for the 3%BWO/TNTs after reaction for different time: (a) 4 h; (b) 8 h; (c) 12 h; (d) 16 h; (e) 20 h; (f) 24 h