Supporting information

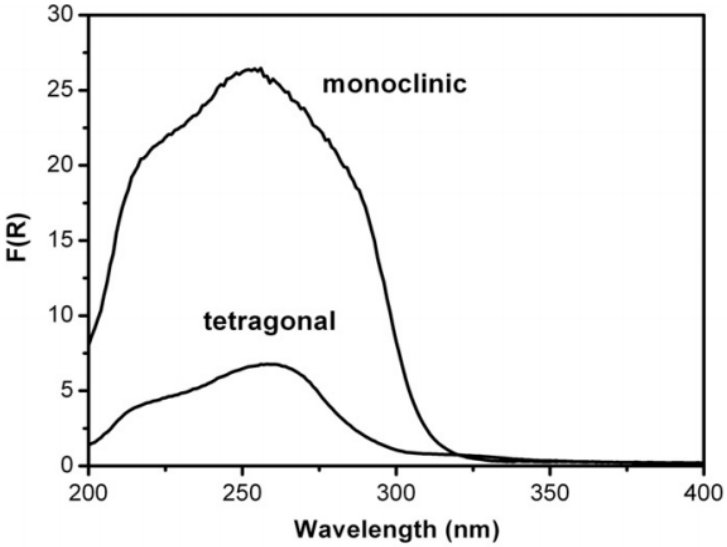

Figure S1. UV–vis diffuse reflectance spectra for both polymorphs of monoclinic and tetragonal $CdWO_4$.

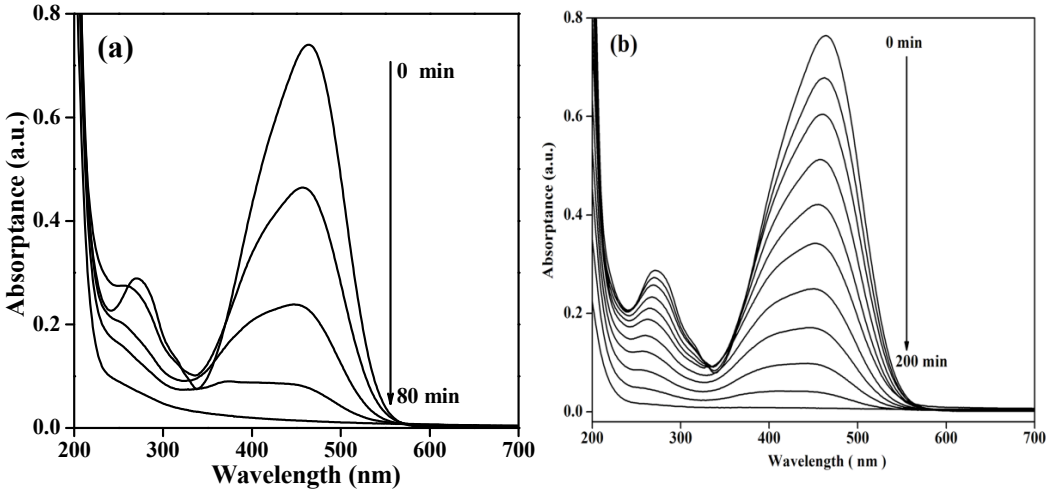

Figure S2. Time dependent absorption spectra of MO solutions in the presence of (a) *m*-$CdWO_4$ and (b) *t*-$CdWO_4$ under UV light irradiation. (*m*-$CdWO_4$ was prepared in water at 200 ^oC for 10 h. *t*-$CdWO_4$ was prepared in 1,2-propanediol at 200 ^oC for 10h.)

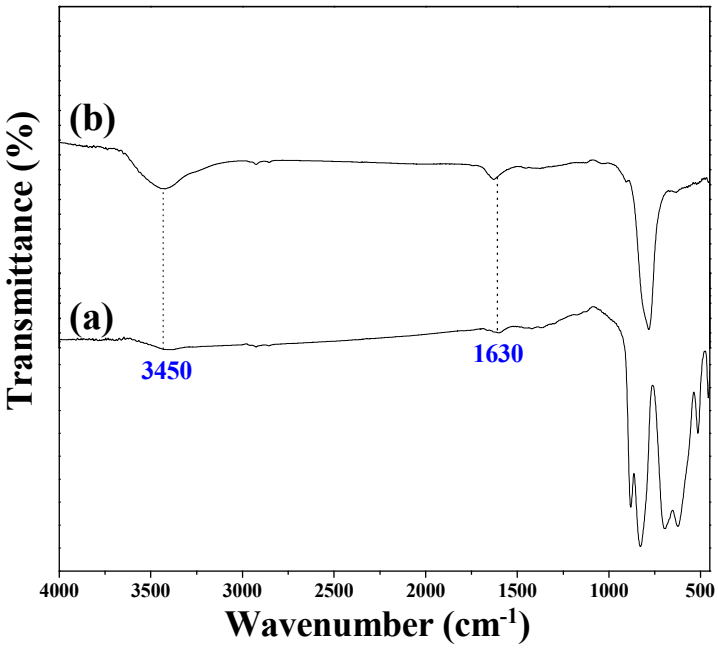

Figure S3. FT-IR spectrum for the as-prepared: (a) *m*-$CdWO_4$, and (b) *t*-$CdWO_4$.

Infrared spectra of the samples were measured on a Perkin-Elmer IR spectrophotometer at a resolution of 4 cm^{-1} by KBr pellet technique. The band observed at 3450 cm^{-1} is attributed to the vibrations of O–H bonds for the water absorbed on sample surfaces and the band centered at 1630 cm^{-1} is associated with the deformation vibration for H–O–H bonds of the physisorption water. The bands appeared at 400~1000 cm^{-1} are the characteristic of the intrinsic vibrations for *t*-$CdWO_4$ and *m*-$CdWO_4$, which are apparently different.

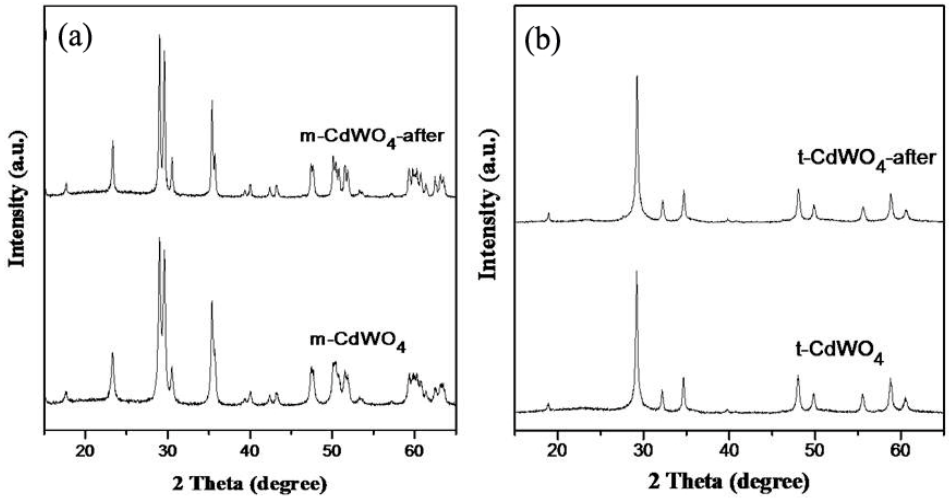

Figure S4. XRD patterns of the as-prepared: (a) *m*-$CdWO_4$, and (b) *t*-$CdWO_4$ before and after photocatalytic reaction.