

# Synthesis of transparent mesoporous tungsten trioxide films with enhanced photoelectrochemical response: Application to unassisted solar water splitting

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## Supporting Information

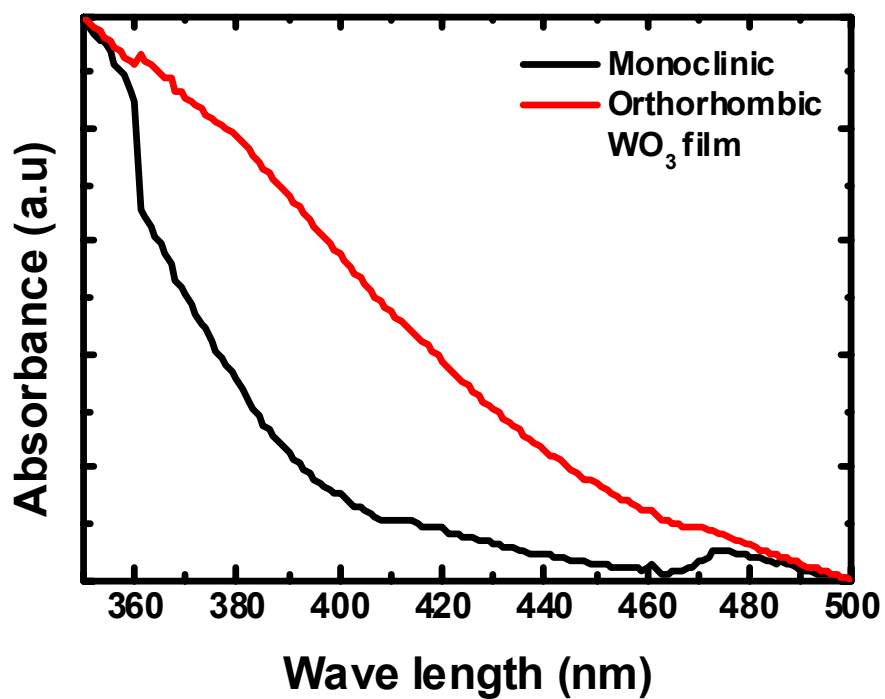


Figure S1. UV-Vis absorbance spectra of WO<sub>3</sub> films with different crystallinities.

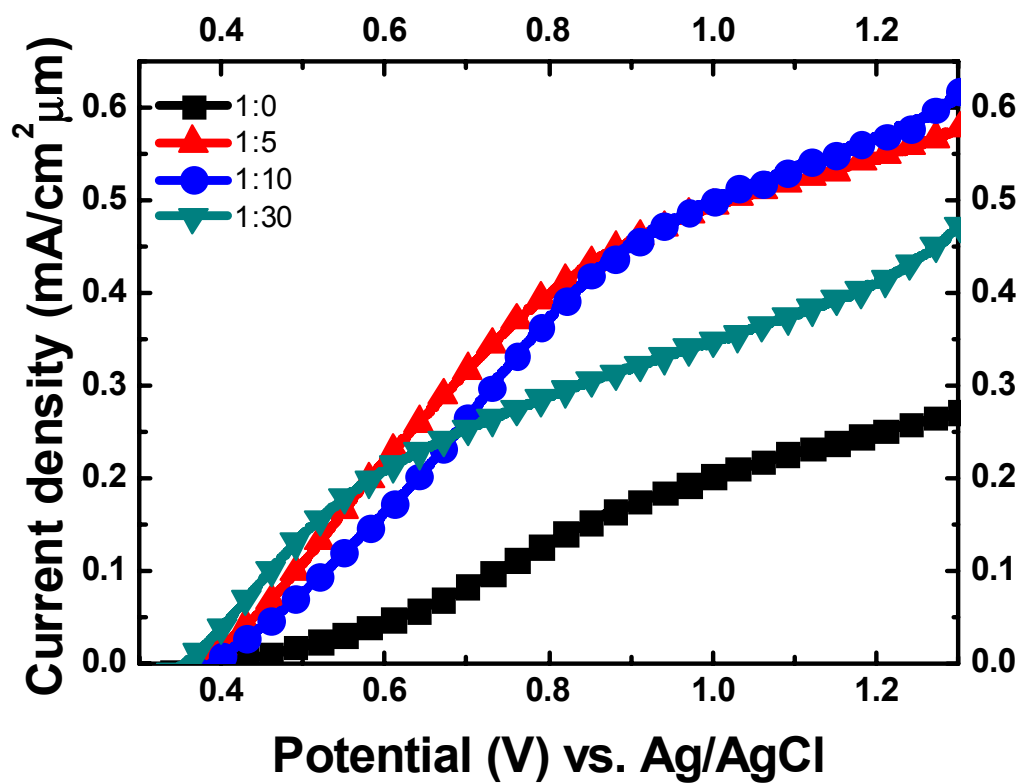


Figure S2. Photocurrent densities of the nanostructured WO<sub>3</sub> films normalized by their film thickness.

## Generated hydrogen gas

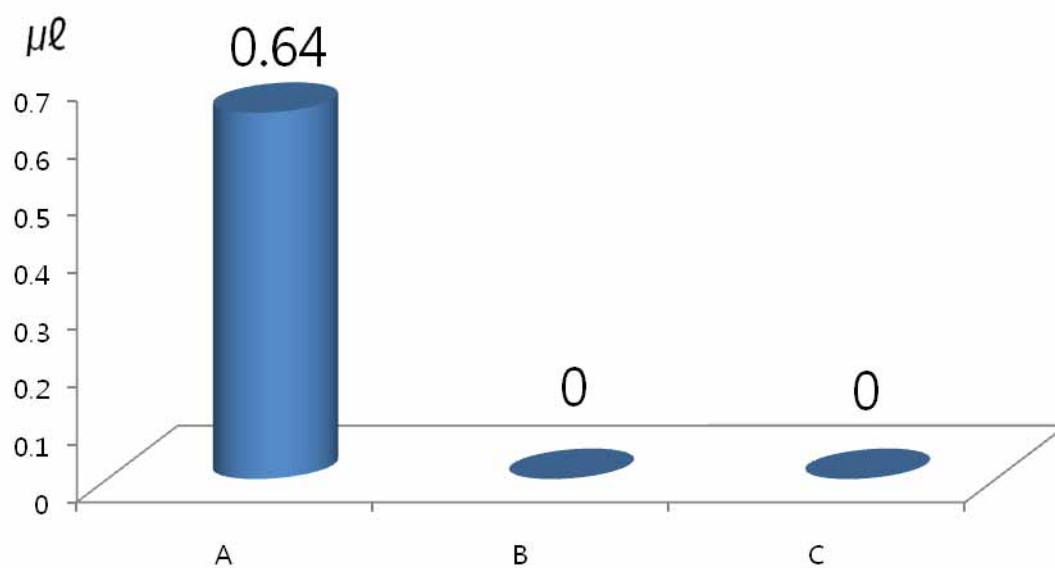


Figure S3. Generation of hydrogen gas from three different cells at zero bias for 1 hours. A:  $\text{WO}_3/\text{DSSC}$  tandem cell based PEC, B:  $\text{WO}_3$  film based PEC and C: DSSC based PEC.  $\text{H}_2/\text{O}_2$  ratio was 2.2:1 for PEC A.

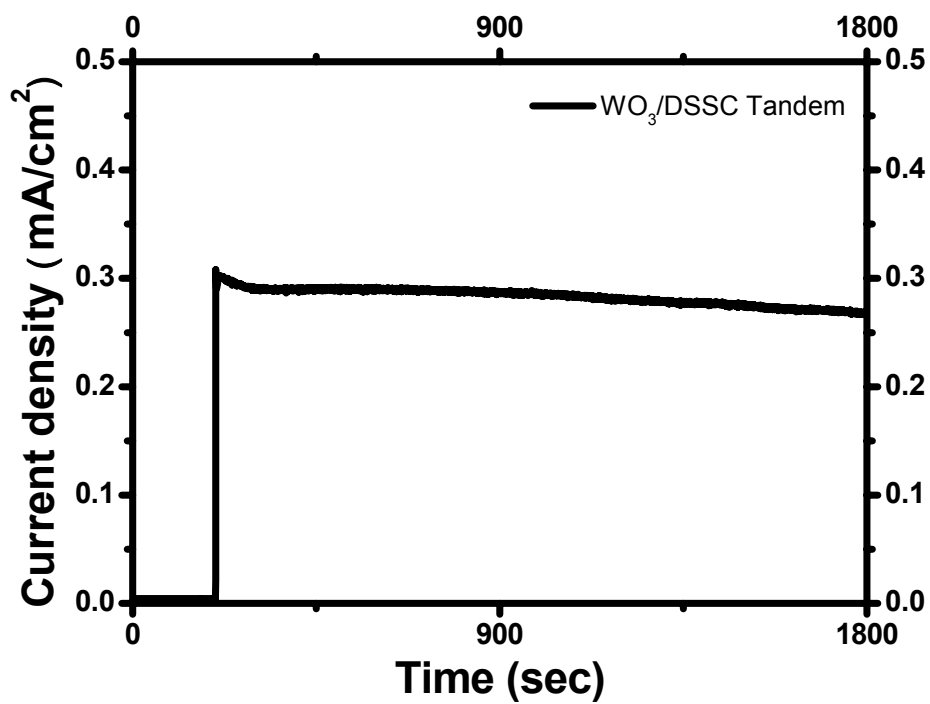


Figure S4. Current versus time measurements of the tandem cell without external potential.