

## **Synthesis of yellow mesoporous Ni-doped TiO<sub>2</sub> with enhanced photoelectrochemical performance under visible light**

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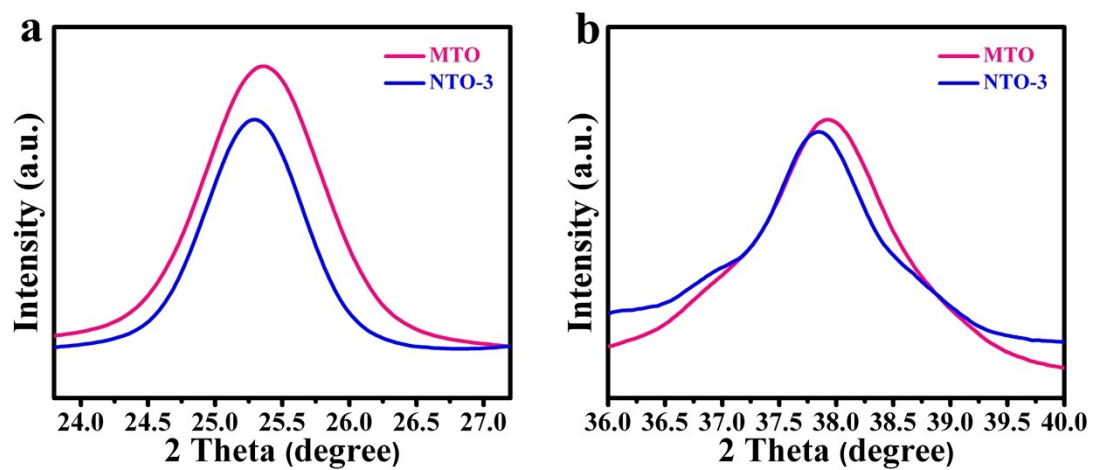


Figure S1. Enlarged XRD patterns of MTO and NTO-3.

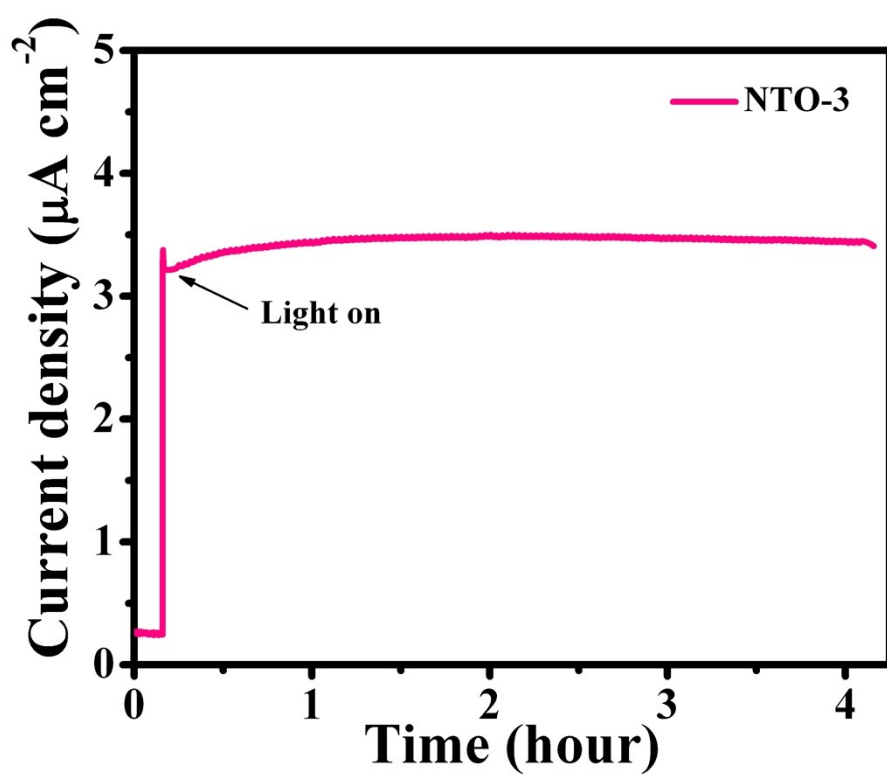


Figure S2.  $i-t$  curves at 1.3 V (vs. RHE) in 1 M NaOH under visible light illumination.

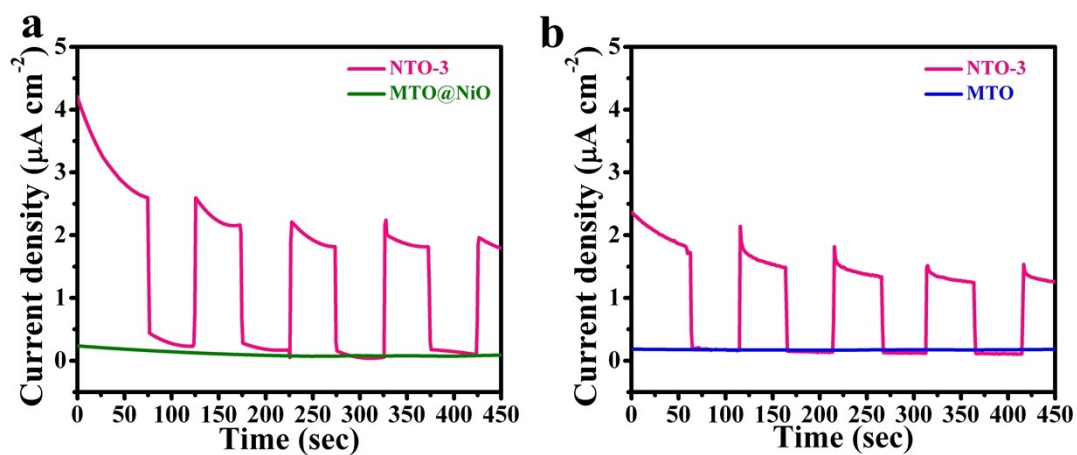


Figure S3. The photocurrent responses under visible light at 1.3 V (vs.RHE) of NTO-3, MTO and MTO@NiO in (a) 0.5 M  $\text{Na}_2\text{SO}_4$  and (b) 0.5M  $\text{Na}_2\text{SO}_4$  containing 0.2 M  $\text{NiSO}_4$ . MTO@NiO was prepared by calcining the mixed grinding powder of MTO and NiO (the molar ratio of Ni/Ti was 0.01) at 400 °C.

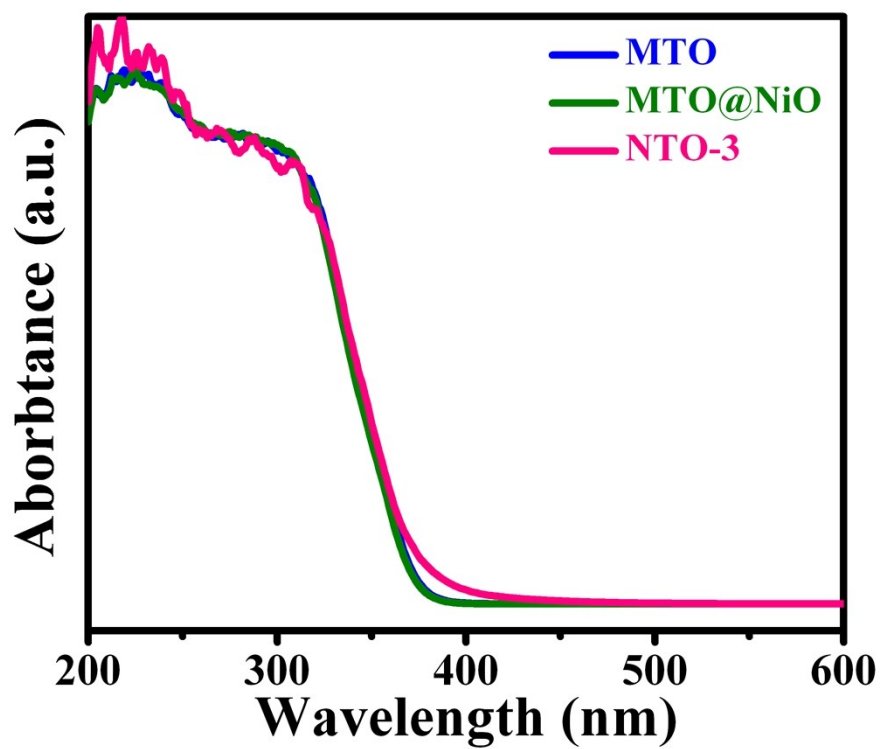


Figure S4. UV-vis absorption spectra of MTO, MTO@NiO and NTO-3.