

Supplementary information

Effect of energy level matching on the enhancement of photovoltaic response about oxide/ Zn_2SnO_4 composites

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Supplementary Figures

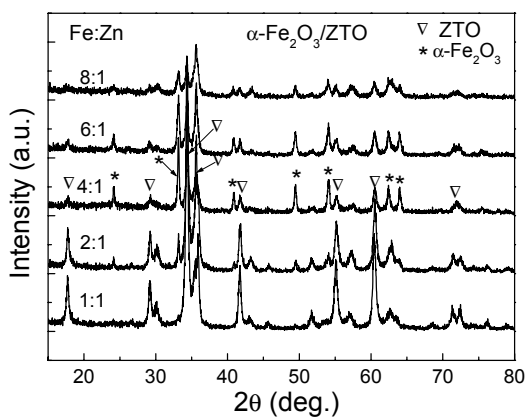


Fig. SI1. The XRD patterns of $\alpha\text{-Fe}_2\text{O}_3/\text{ZTO}$ with the molar ratio 1:1, 2:1, 4:1, 6:1 and 8:1 of Fe/Zn, respectively.

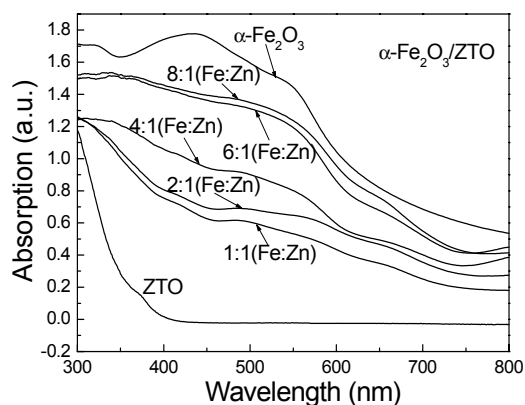


Fig. SI2. The absorption spectrums of $\alpha\text{-Fe}_2\text{O}_3/\text{ZTO}$ with the molar ratio 1:1, 2:1, 4:1, 6:1 and 8:1 of Fe/Zn, respectively.

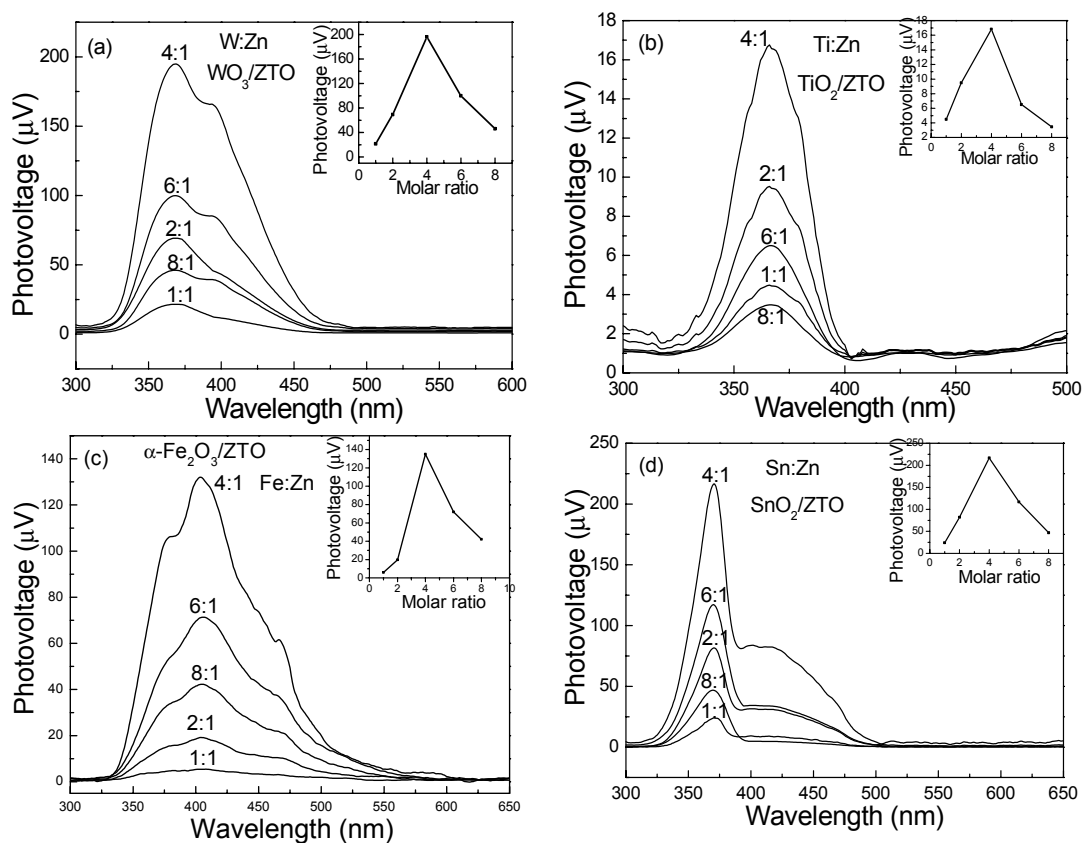


Fig. SI3. ((a), (b), (c) and (d)) The SPS of WO_3/ZTO , TiO_2/ZTO , $\alpha\text{-Fe}_2\text{O}_3/\text{ZTO}$ and SnO_2/ZTO with the molar ratio 1:1, 2:1, 4:1, 6:1 and 8:1 of (W, Ti, Fe and Sn)/Zn, respectively. The insets of **Fig. SI3**((a), (b), (c) and (d)) The change trends of SPS about WO_3/ZTO , TiO_2/ZTO , $\alpha\text{-Fe}_2\text{O}_3/\text{ZTO}$ and SnO_2/ZTO with the molar ratio 1:1, 2:1, 4:1, 6:1 and 8:1 of (W, Ti, Fe and Sn)/Zn, respectively.