

Supporting information

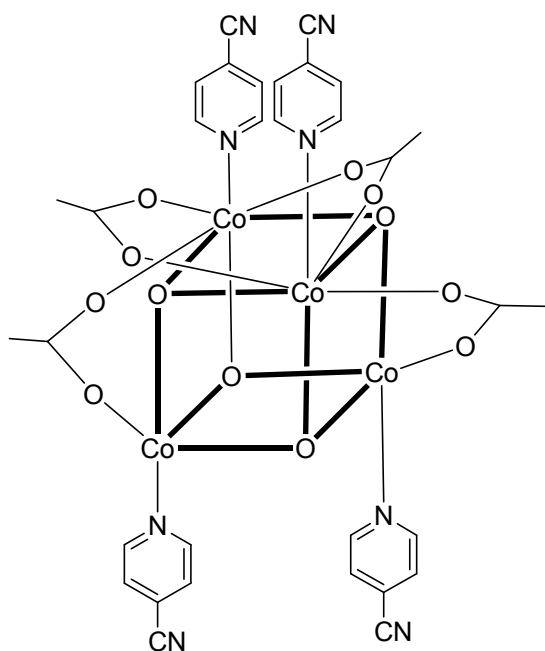


Figure S1. The structure of Co-cubane catalyst

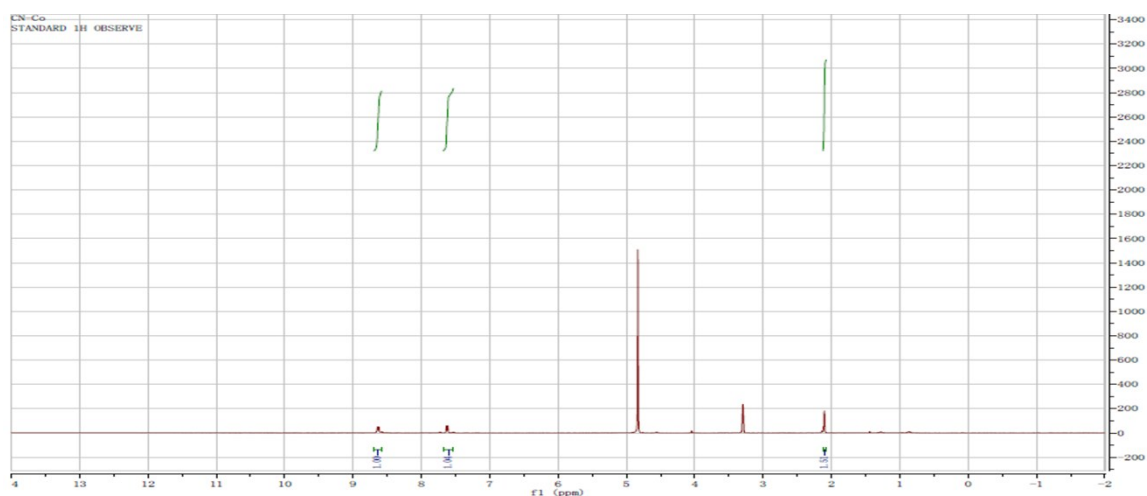


Figure S2. $^1\text{H-NMR}$ of the Co-cubane catalyst

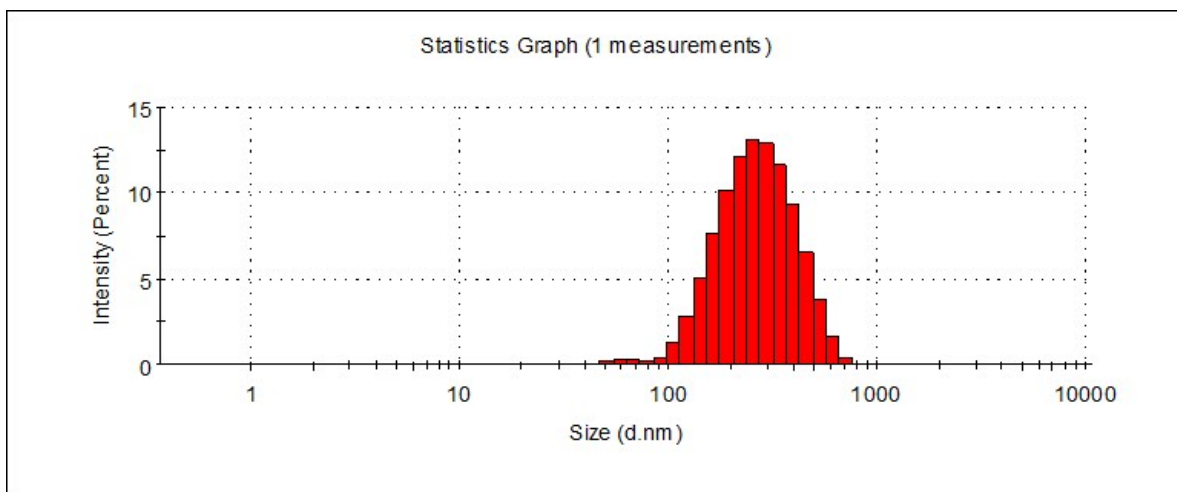


Figure S3. Dynamic Light Scattering(DLS) of nanosphere TiO_2

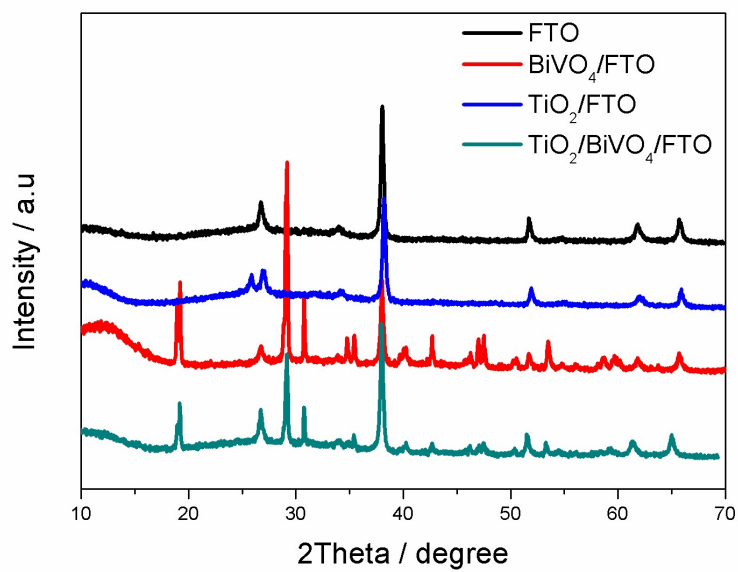


Figure S4. The XRD of BiVO_4 , TiO_2 and $\text{TiO}_2/\text{BiVO}_4$ electrodes

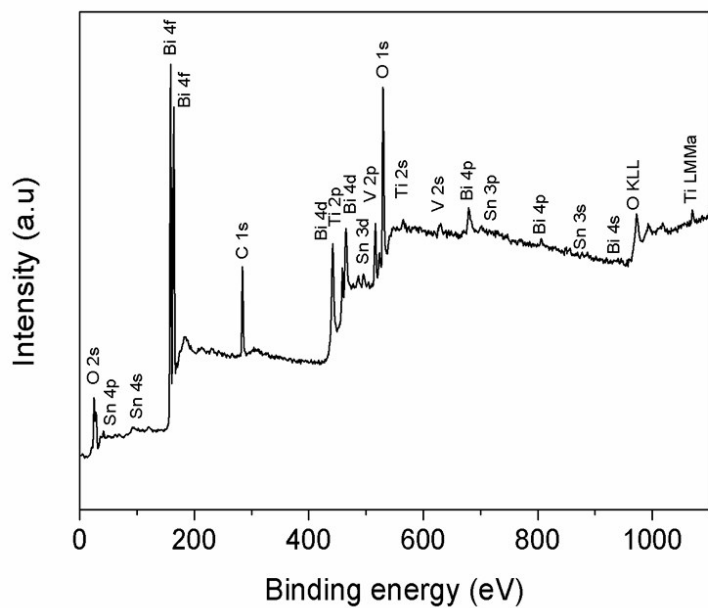


Figure S5. The XPS spectrum of $\text{TiO}_2/\text{BiVO}_4/\text{FTO}$ electrode

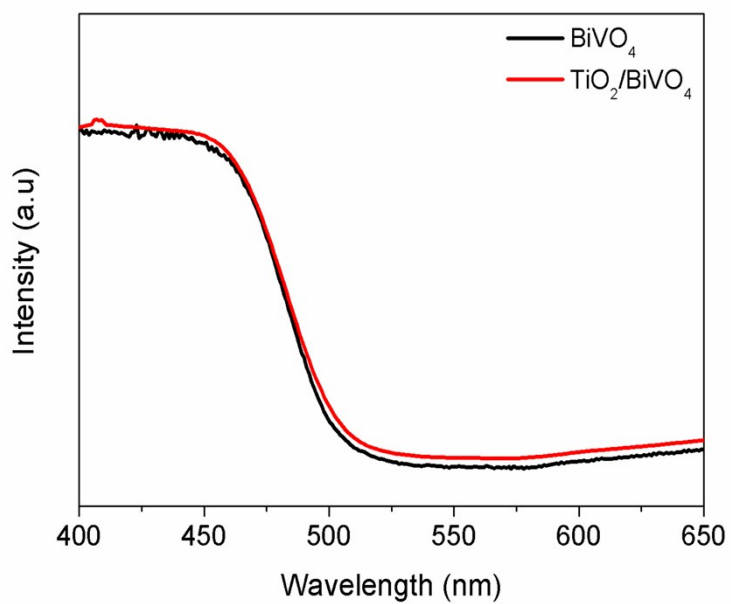


Figure S6. The UV-spectrum of BiVO_4 and $\text{TiO}_2/\text{BiVO}_4$ electrodes

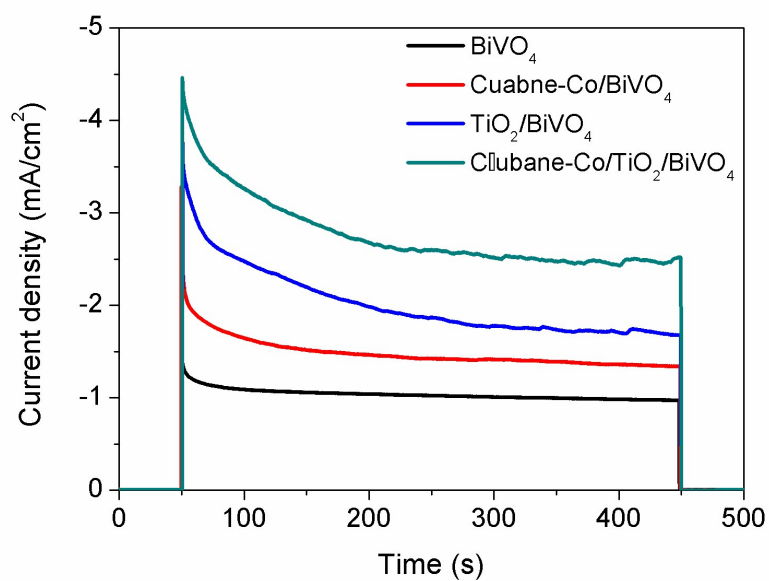


Figure S7. J-t cures of Cubane-Co/TiO₂/BiVO₄, Cubane-Co/BiVO₄ TiO₂/BiVO₄ and BiVO₄ electrodes in PBS solution at 1.23 V vs. RHE.

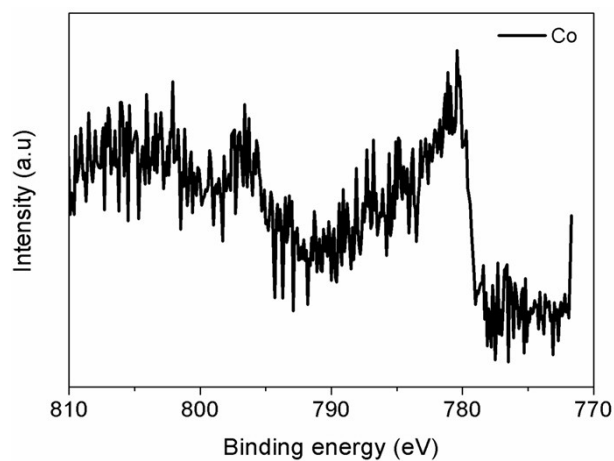


Figure S8. XPS spectra of the Co-cubane/TiO₂/BiVO₄ electrode

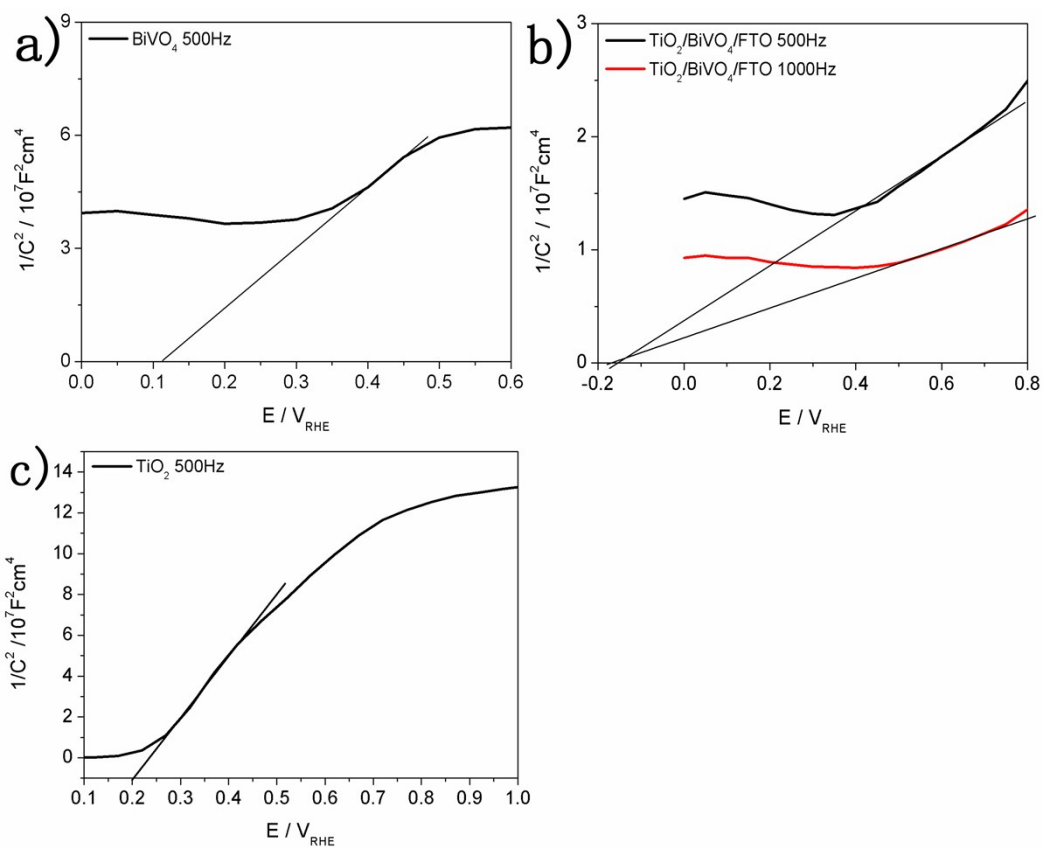


Figure S9. The Mott-Schottky plots of $BiVO_4$ and TiO_2 measured in 0.1 M PBS solution

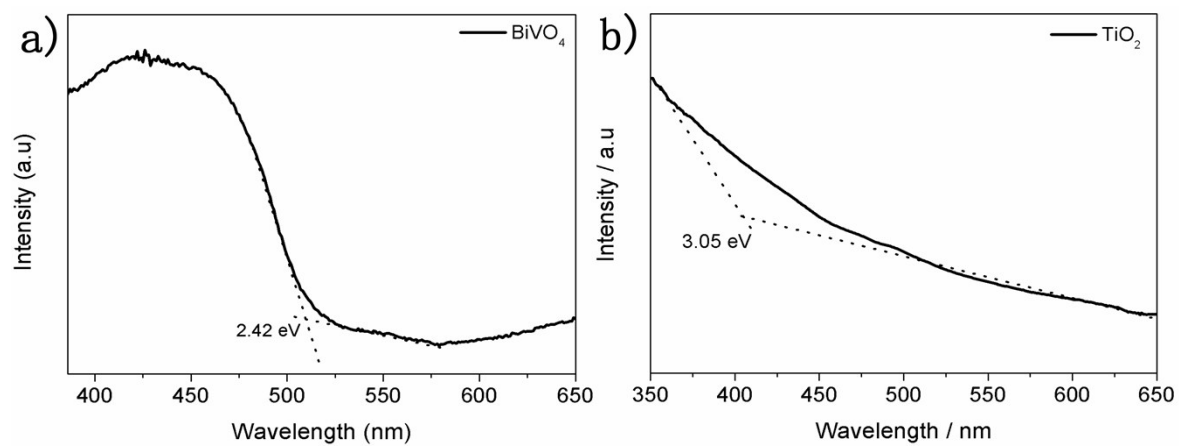


Figure S10. UV-Vis absorption spectrum of $BiVO_4$ and TiO_2