

Electronic Supplementary Information

Physical and Photoelectrochemical Characterization of Ti-doped Hematite Photoanodes Prepared by Solution Growth

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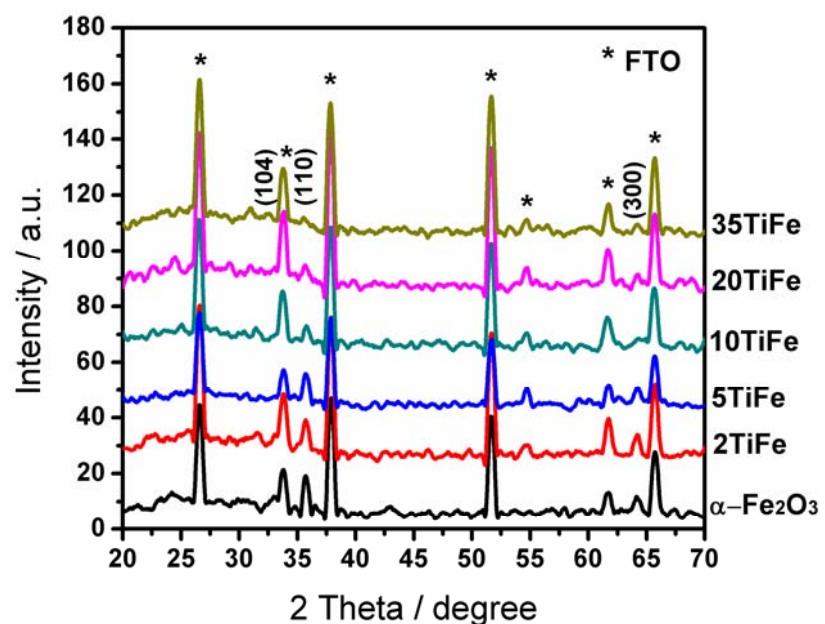


Figure S1 XRD patterns of α -Fe₂O₃ and Ti-doped α -Fe₂O₃.

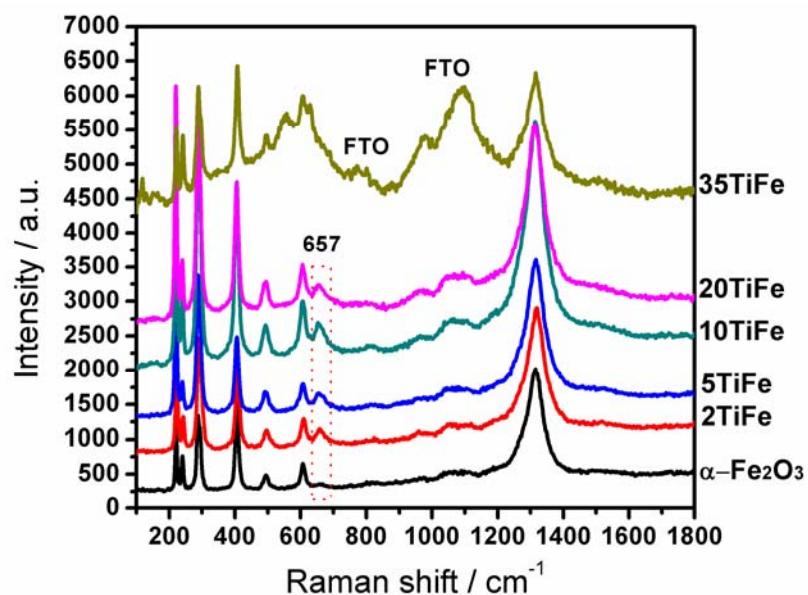


Figure S2 Raman spectra of $\alpha\text{-Fe}_2\text{O}_3$ and Ti-doped $\alpha\text{-Fe}_2\text{O}_3$.

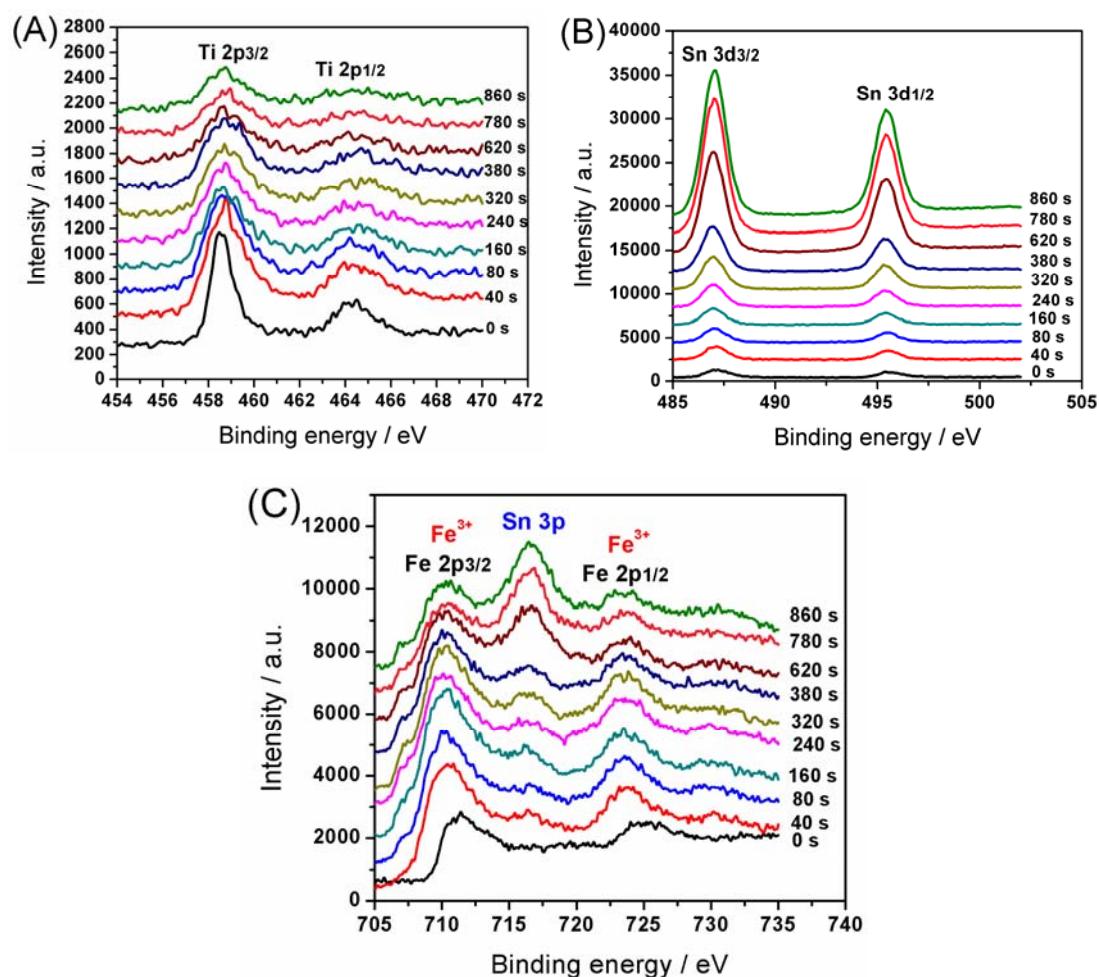


Figure S3 XPS spectra of the 20TiFe sample depending on etching time. (A) Ti 2p spectra, (B) Sn 3d spectra, (C) Fe 2p spectra.

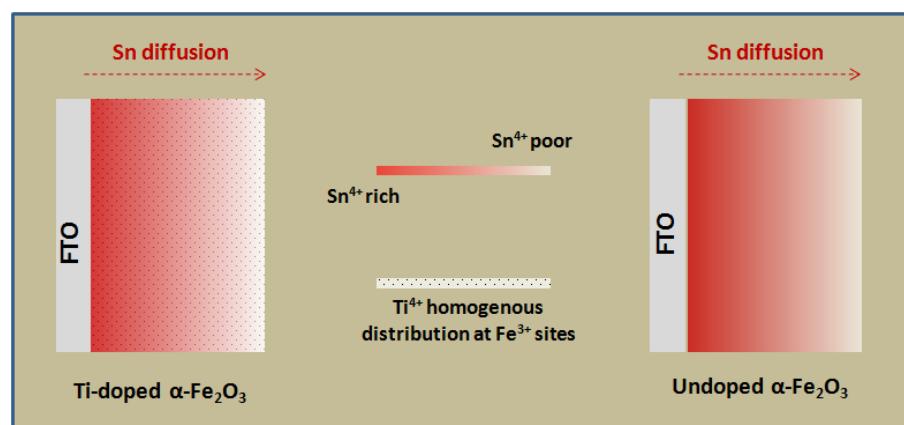


Figure S4 Schematic of element distribution within Ti-doped α -Fe₂O₃ film.

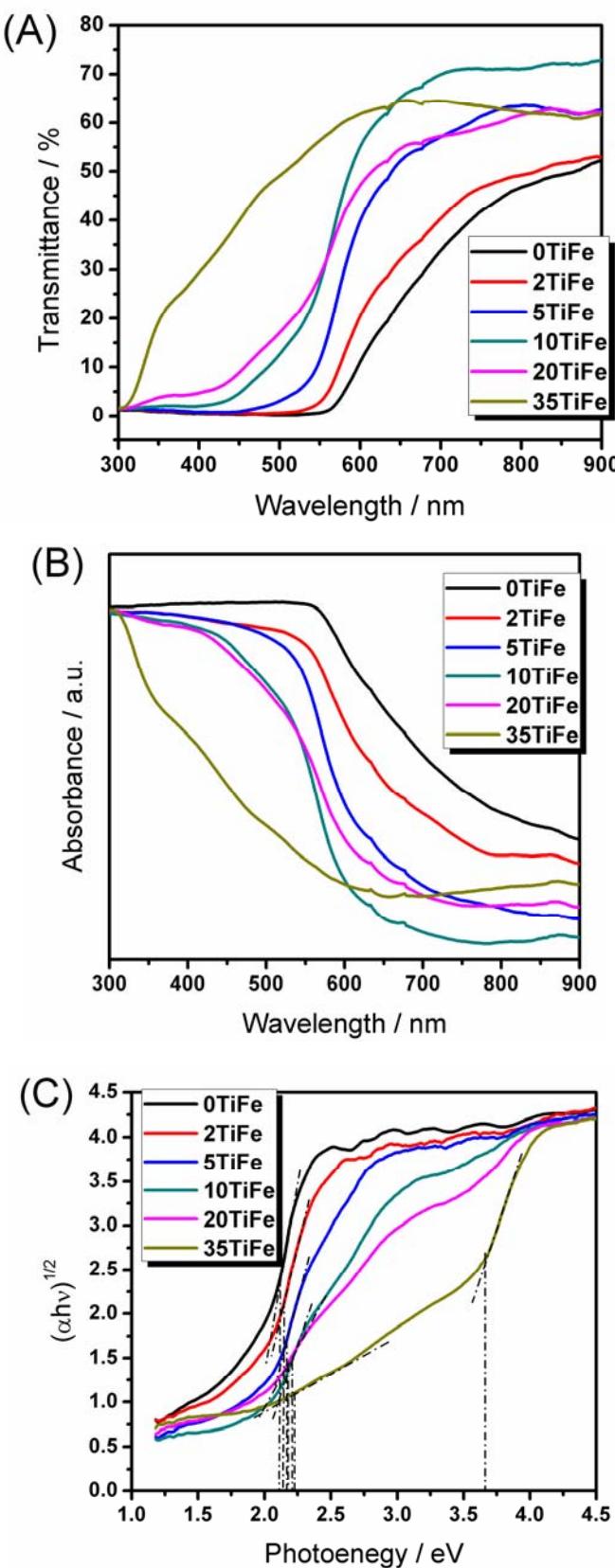


Figure S5 (A) Transmittance and (B) absorptance spectra, and (C) the calculated function $(\alpha h\nu)^{1/2}$ vs. photonenergy plot for α -Fe₂O₃ and Ti-doped α -Fe₂O₃.