Electronic Supplementary Material (ESI) for Nanoscale.
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Supporting Information

of

Enhanced Photoelectrochemical Water Oxidation via Atomic Layer Deposition of TiO_2 on Fluorine-Doped Tin Oxide Nanoparticle Films

Isvar A. Cordova, Qing Peng,* Isa L. Ferrall, Adam J. Rieth, Paul G. Hoertz, Jeffrey T. Glass**
Email: isvar.cordova@duke.edu; qing.peng@duke.edu; jtglass@duke.edu

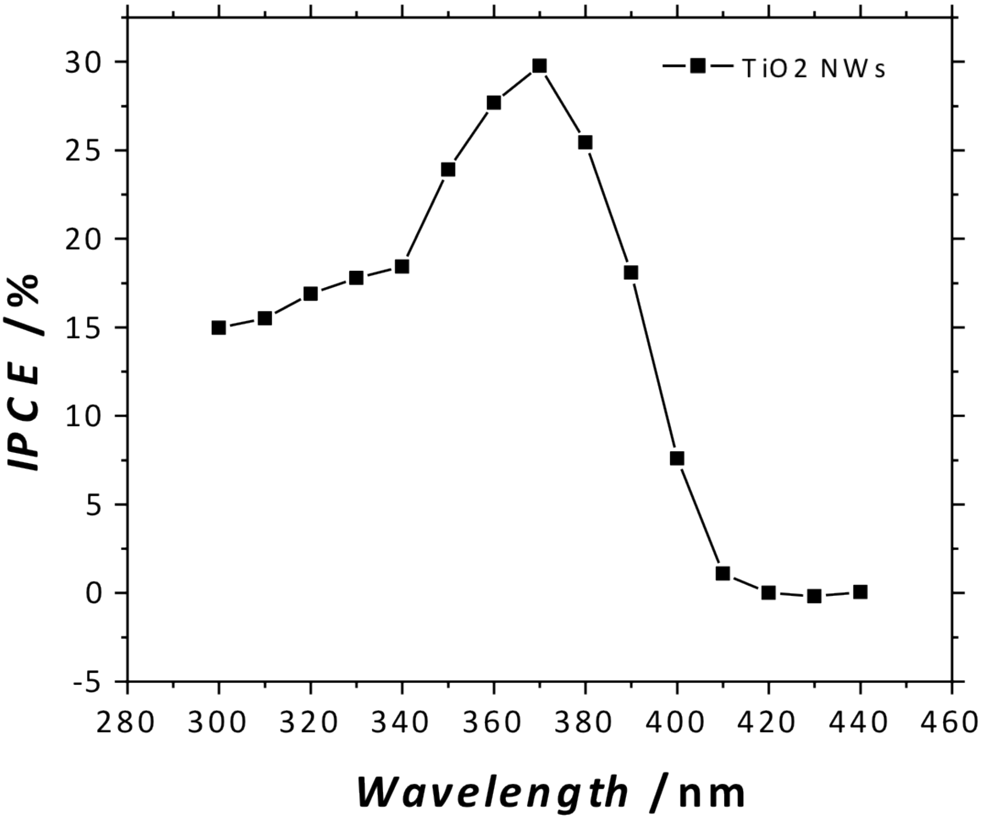

Figure S1. IPCE spectrum of 1.8 µm rutile TiO_2 NW on FTO glass.

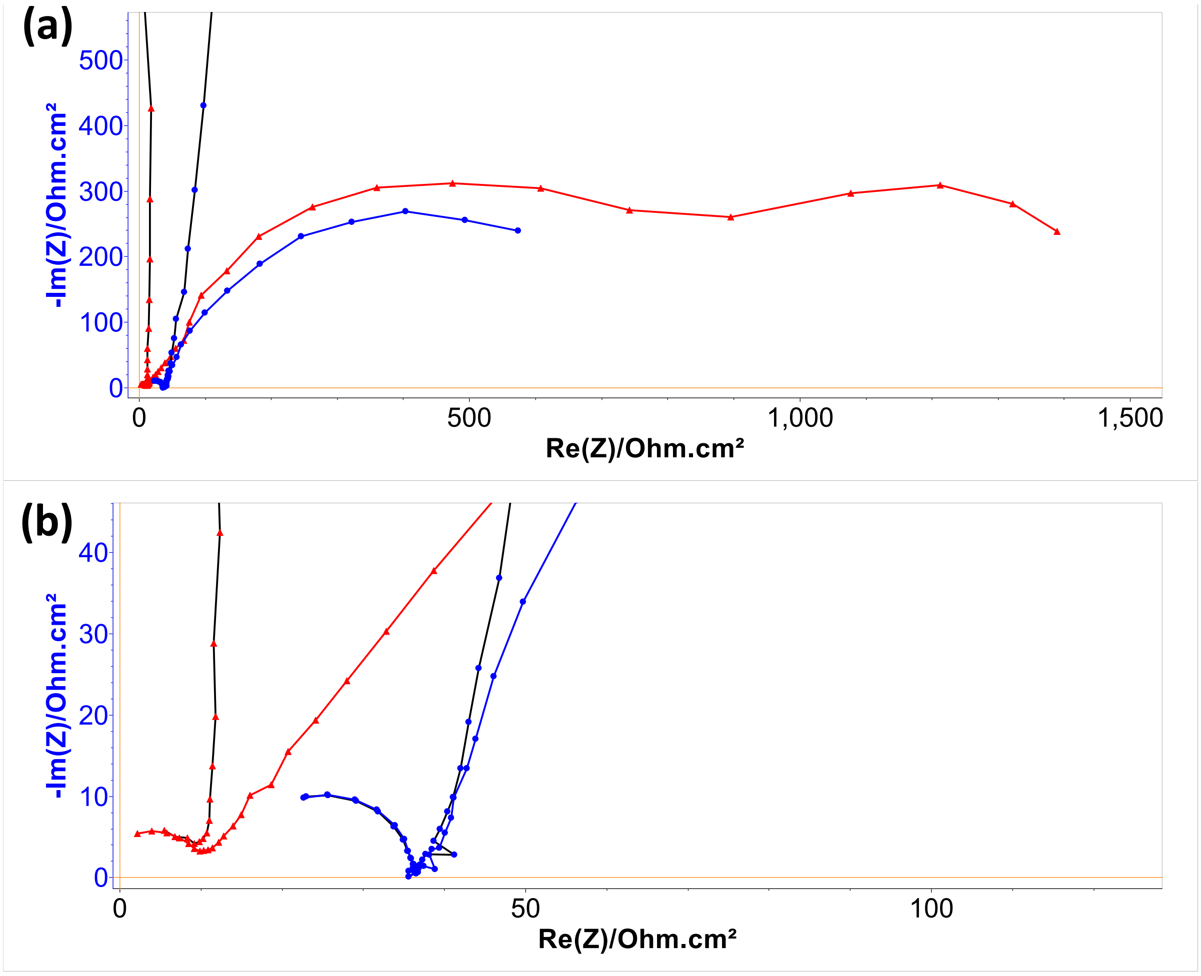

Figure S2. EIS Spectra collected at $E_{Ag/AgCl} = 0$ V displayed across a) full frequency range and b) in higher frequency range for both TiO_2 NWs (red markers) and TiO_2(10nm)/nanoFTO (blue markers) in dark (black lines) and under illumination (colored lines).

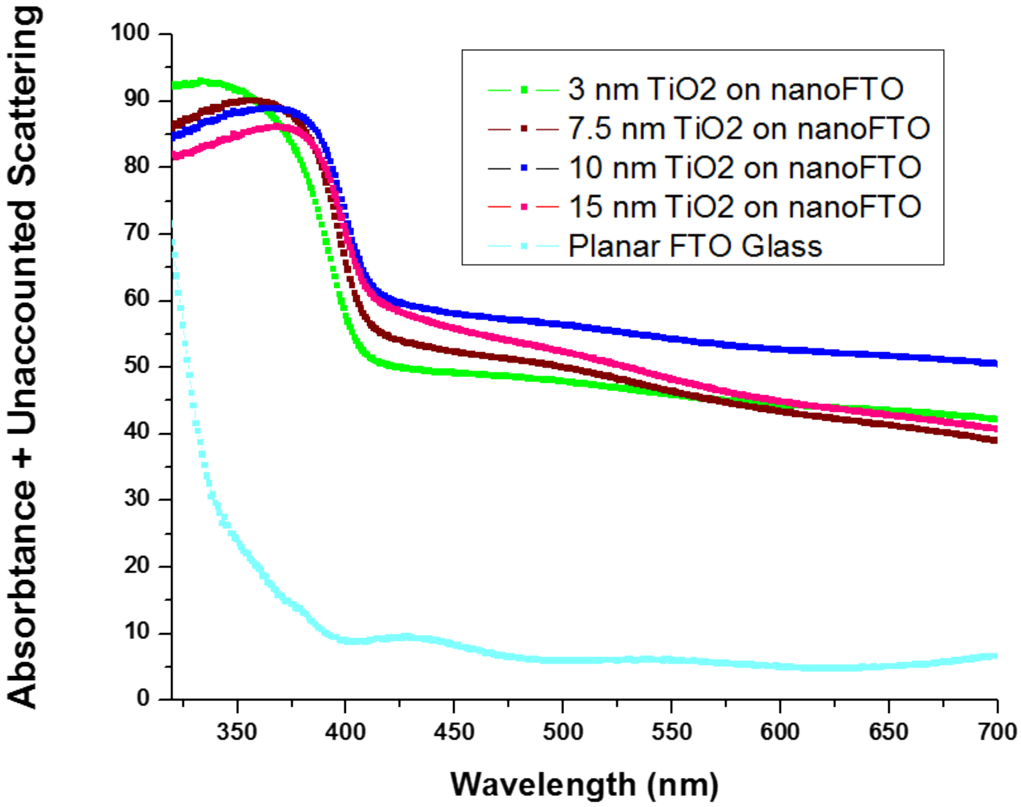

Figure S3. UV-Vis spectra from TiO2/nanoFTO samples tested with the underlying planar FTO glass substrate as a blank for reference. Since neither FTO nor TiO2 is expected to absorb in the wavelength regime above 415 nm, these higher values are expected to due to strong scattering effects from the nanoFTO scaffold.

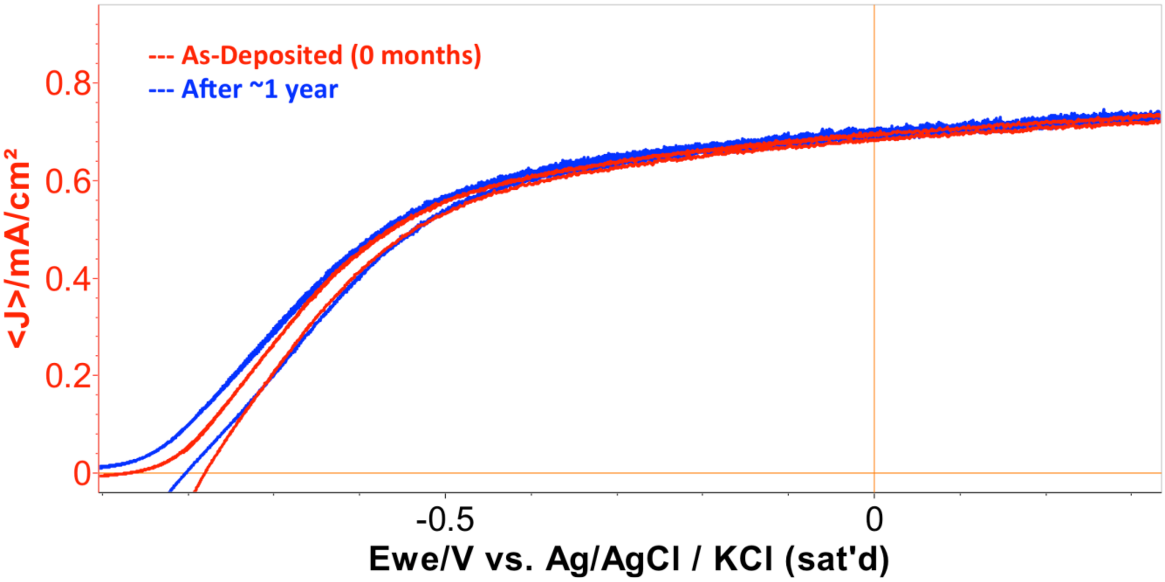

Figure S4. Cyclic voltammograms of a TiO_2(10nm)/nanoFTO sample shortly after being deposited with TiO2 (red curve) and after 1 year of intermittent testing (blue curve).