(1) Electronic Supplementary Information

Constructing Fe_2O_3/TiO_2 Core-Shell Photoelectrodes for Efficient Photoelectrochemical Water Splitting

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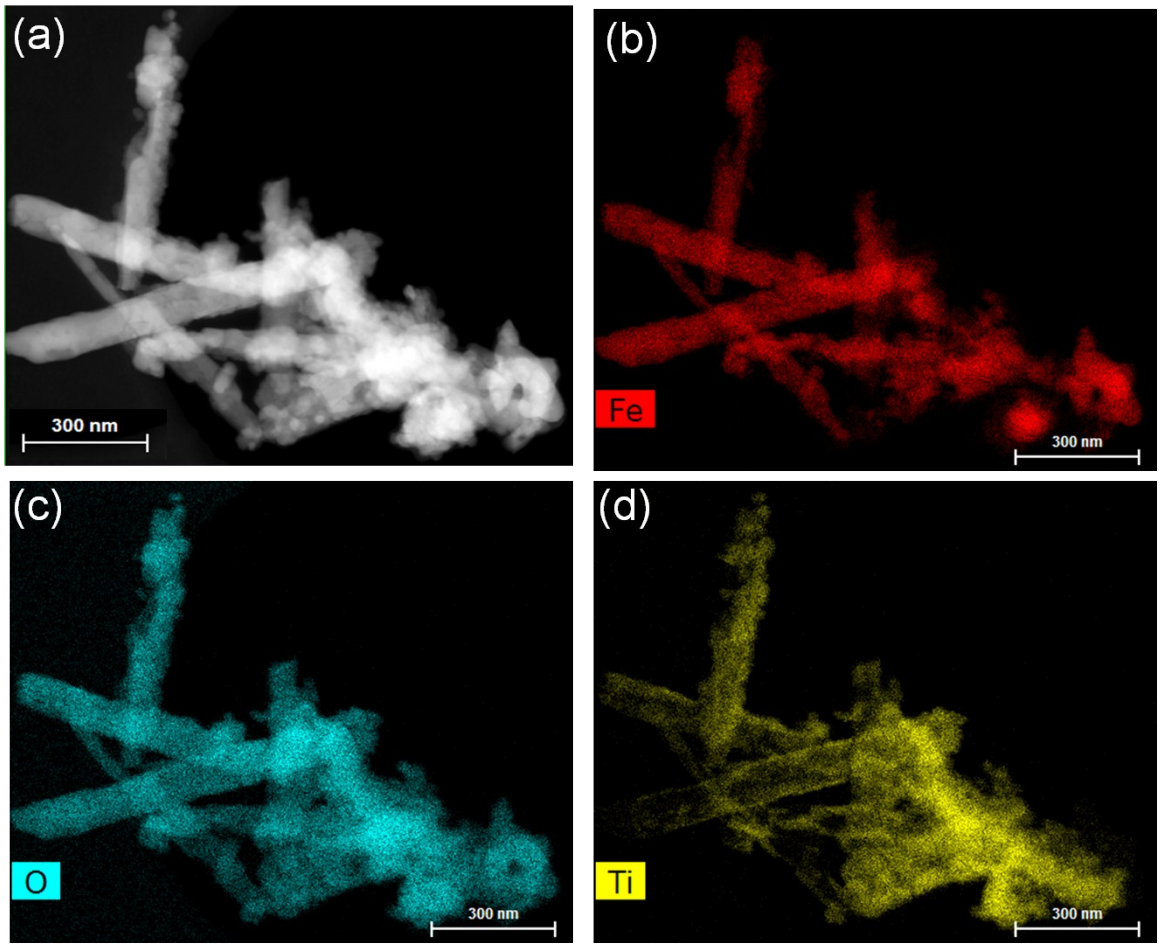

Fig. S1. TEM-EDX mapping images of Fe_2O_3/TiO_2 core-shell nanorod arrays with 20 min deposition for TiO_2 layer.

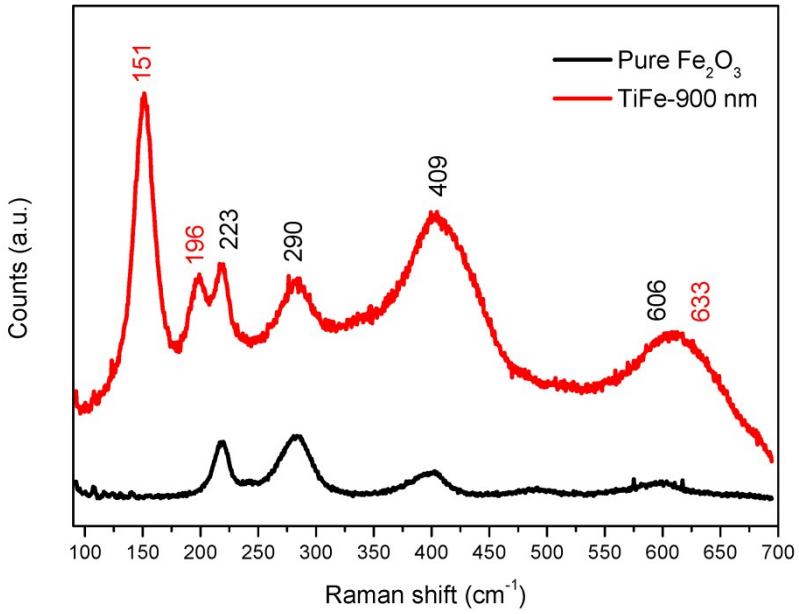

Fig. S2. Raman spectra of pristine Fe_2O_3 and Fe_2O_3/TiO_2 core-shell nanorod arrays with a thickness around 900 nm.

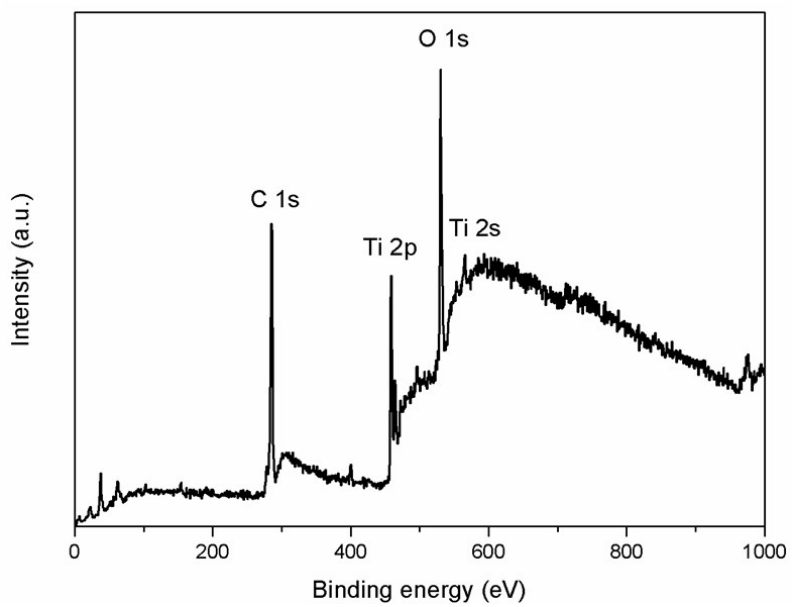

Fig. S3. Survey-scan XPS spectra of Fe_2O_3/TiO_2 core-shell nanorod arrays with a thickness around 900 nm.

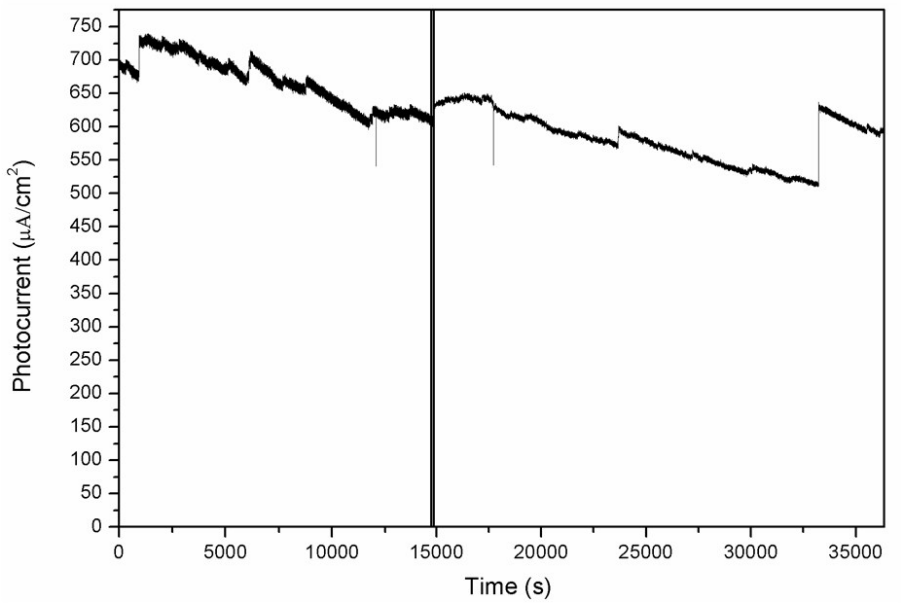

Fig. S4. I-t measurement of Fe_2O_3/TiO_2 core-shell nanorod arrays with a thickness around 900 nm. (Light resource: 75 W Xe lamp with AM 1.5 G filter; Electrolyte: 1 M of NaOH aqueous solution; Counter electrode: Pt; Reference electrode: SCE; and Applied potential: 0.5 V)

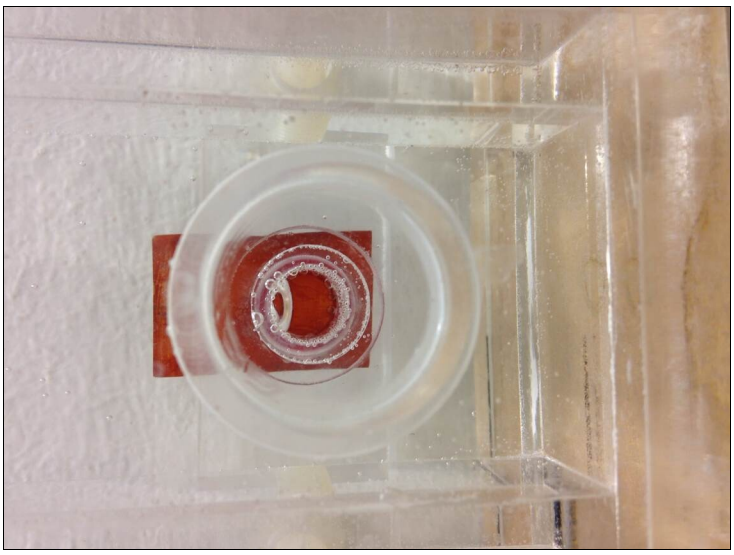

Fig. S5. Digital photograph of the PEC cell after 10 h I-t measurement.