Supporting information for:

Controlled fabrication of Sn/TiO_2 nanorods for photoelectrochemical water splitting

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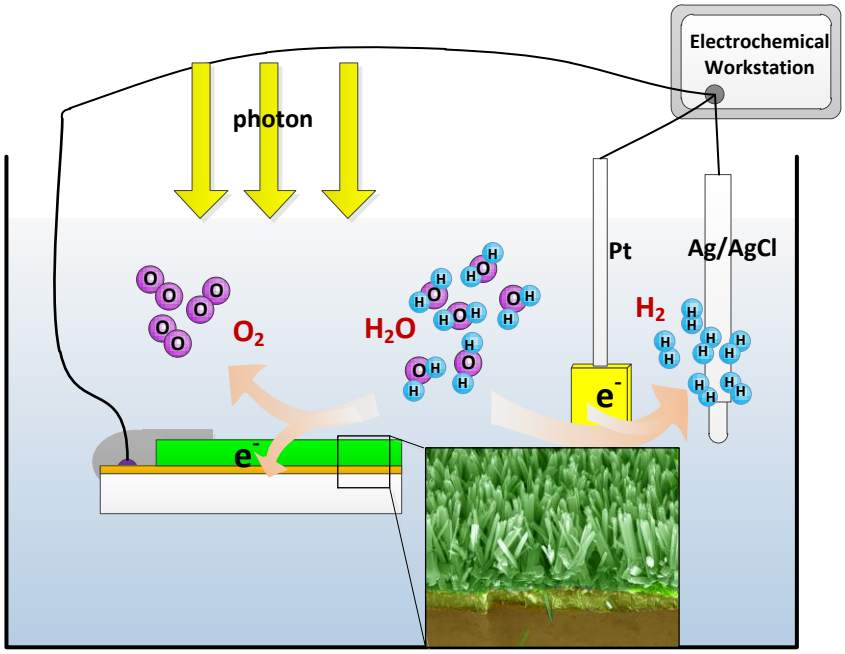

Figure S1: Schematic illustration of the water splitting process in PEC cell.

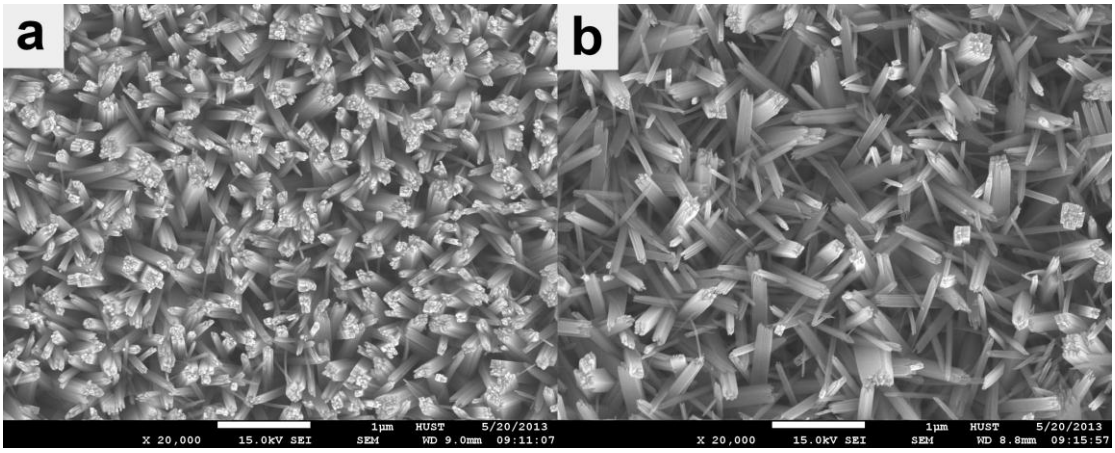

Figure S2: SEM images of the Sn/TiO_2 NRs with different doping levels, (a) Sn/TiO_2-0.5% NRs, (b) Sn/TiO_2-8% NRs.

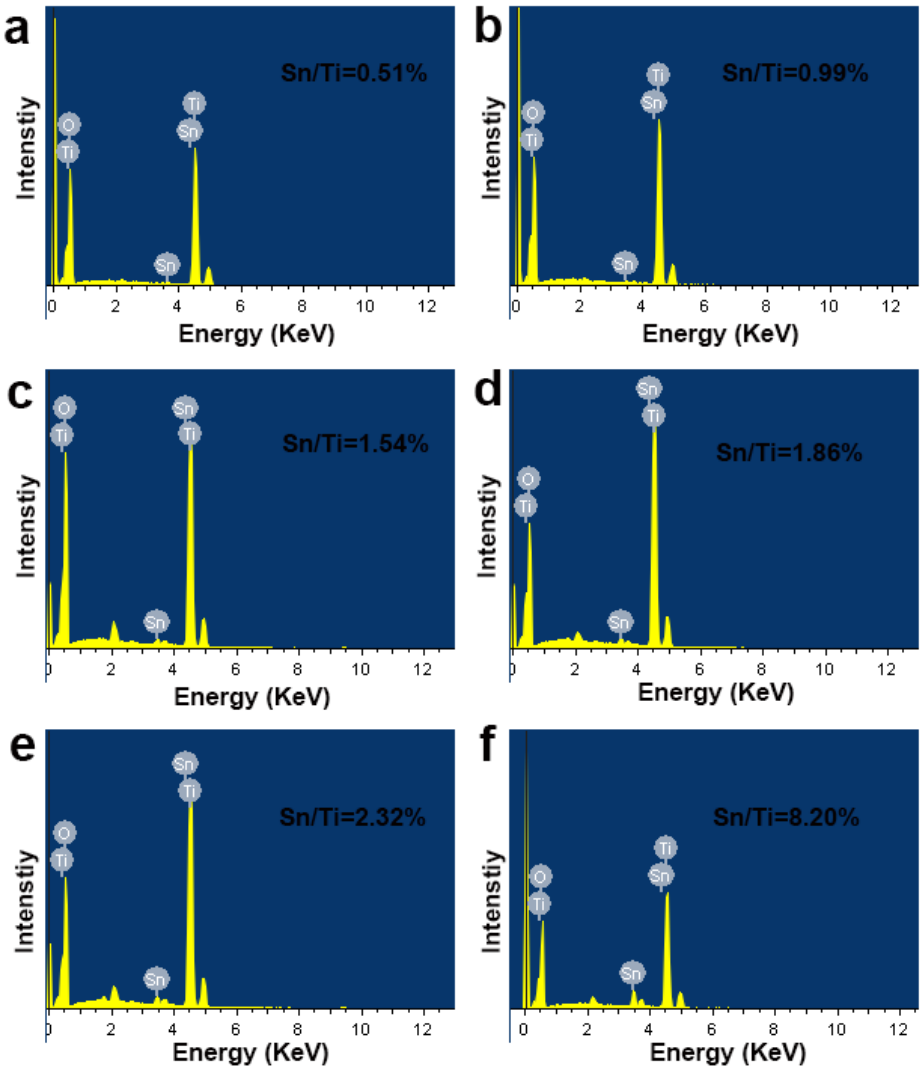

Figure S3: EDX spectra measured from a series of Sn/TiO_2 NRs, with initial $SnCl_4$ /TBOT ratio range from 0.5% to 8%, (a) 0.5%, (b) 1%, (c) 1.5%, (d) 2%, (e) 3%, (f) 8%, the marked values in the spectra are detected Sn/Ti ratio.

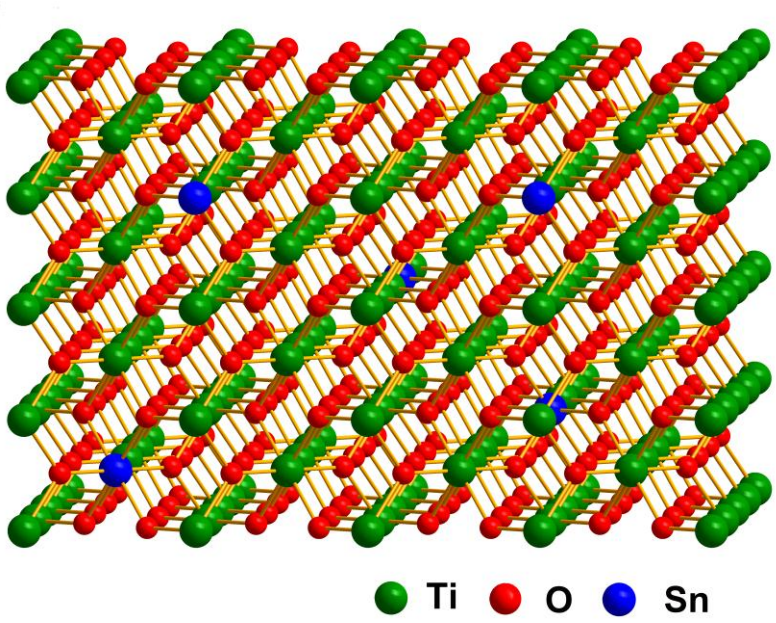

Figure S4: A supercell for modeling the crystal structure of the Sn/TiO_2 NRs.

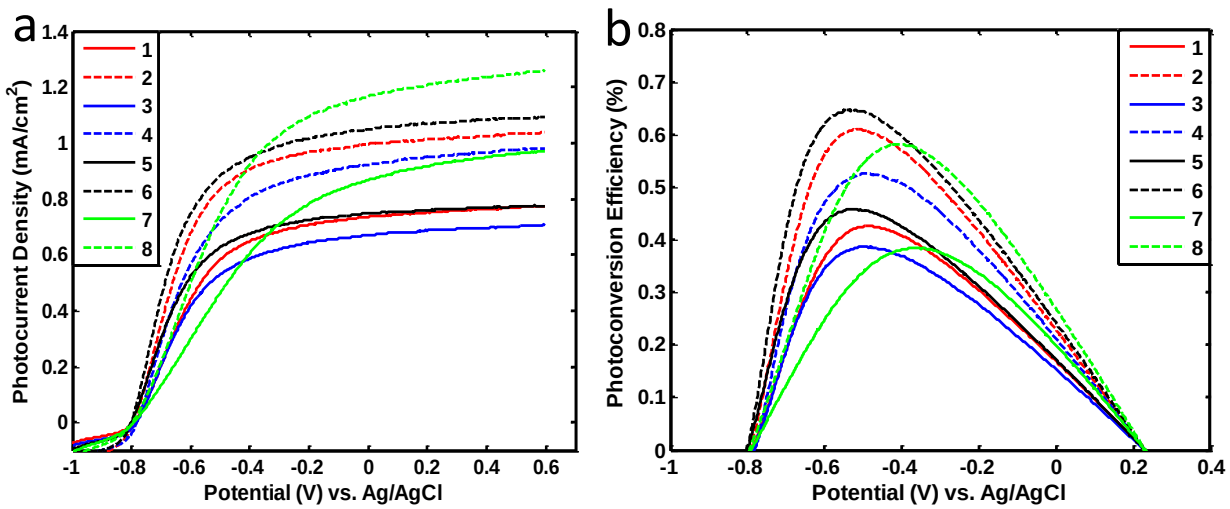

Figure S5: The photocatalytic properties of TiO_2 and Sn/TiO_2 nanorods with different morphology, (a) photoconversion density, (b) photoconversion efficiency. (1) TiO_2 nanorods synthesized under 150℃ for 18 hours, (2) Sn/TiO_2-1% nanorods synthesized under 150℃ for 18 hours, (3) TiO_2 nanorods synthesized under 180℃ for 4 hours, (4) Sn/TiO_2-1% nanorods synthesized under 180℃ for 4 hours, (5) TiO_2 nanorods synthesized under 180℃ for 6 hours, (6) Sn/TiO_2-1% nanorods synthesized under 180℃ for 6 hours, (7) TiO_2 nanorods synthesized under 180℃ for 6 hours for twice, (8) Sn/TiO_2-1% nanorods synthesized under 180℃ for 6 hours for twice.