Supporting Information

Nanostructured Fe2TiO5 photoanode with enhanced photoelectrochemical water splitting performance by Zn2+ doping and FeNi(OH)x cocatalyst deposition

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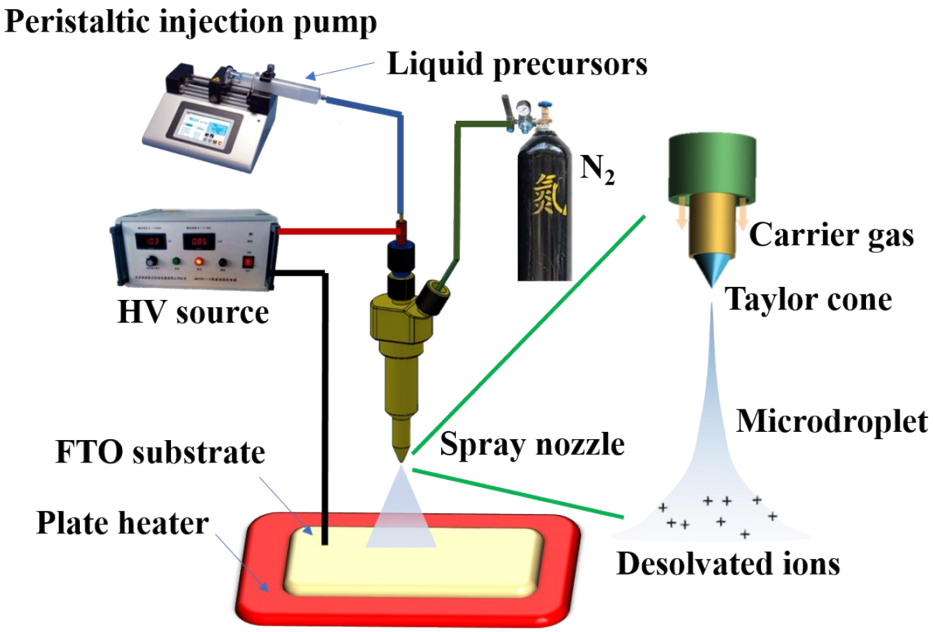

Figure S1 Schematic diagram of homemade electrospray equipment.

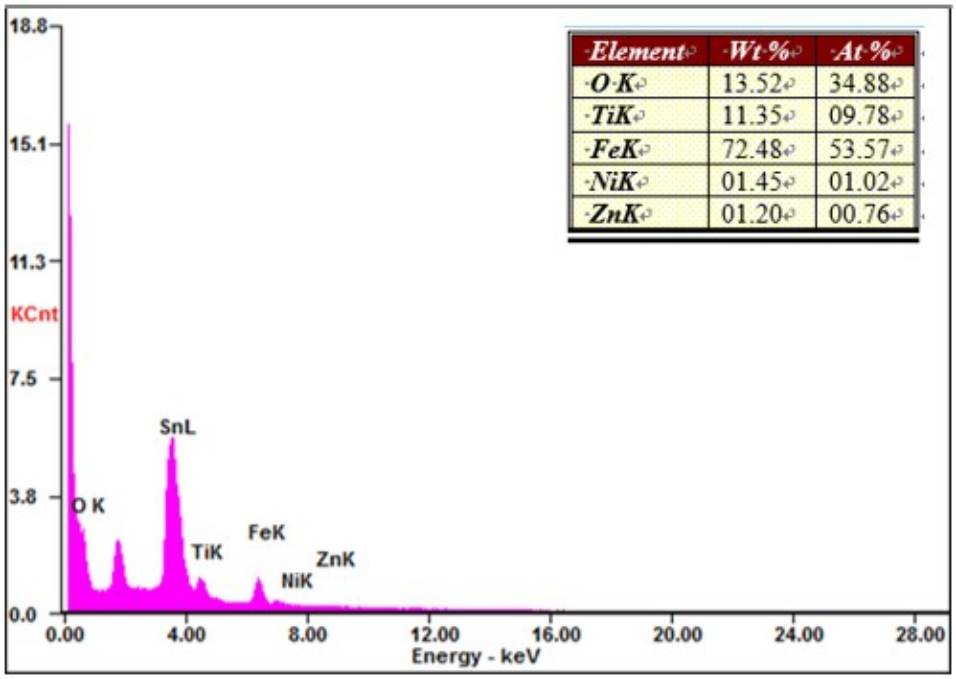

Figure S2 EDS spectra of $FeNi(OH)_x/Zn@ Fe_2TiO_5$ photoanode.

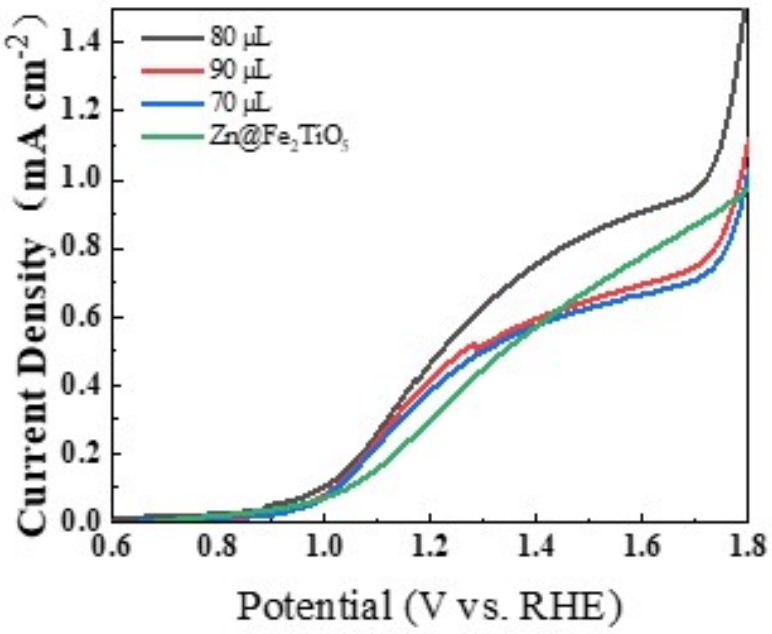

Figure S3 LSV curves of $FeNi(OH)_x/Zn@Fe_2TiO_5$ with different volume of Fe-Ni precursor deposition.

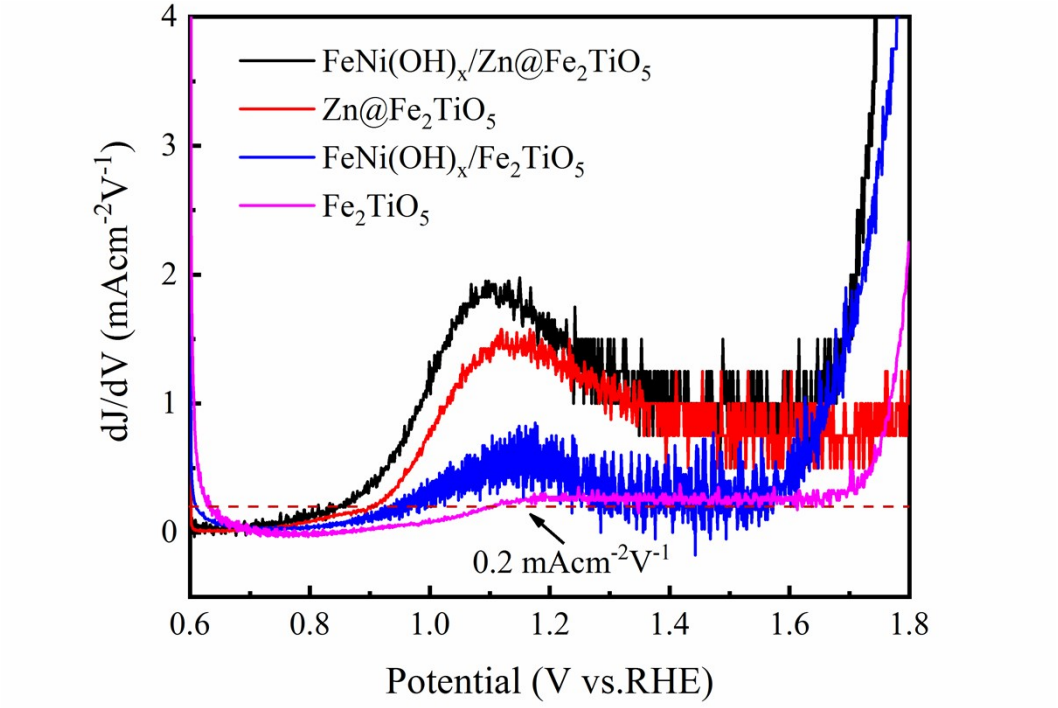

Figure S4 First-order derivative of the photocurrent densities based on the J-V curves of Figure 4b.

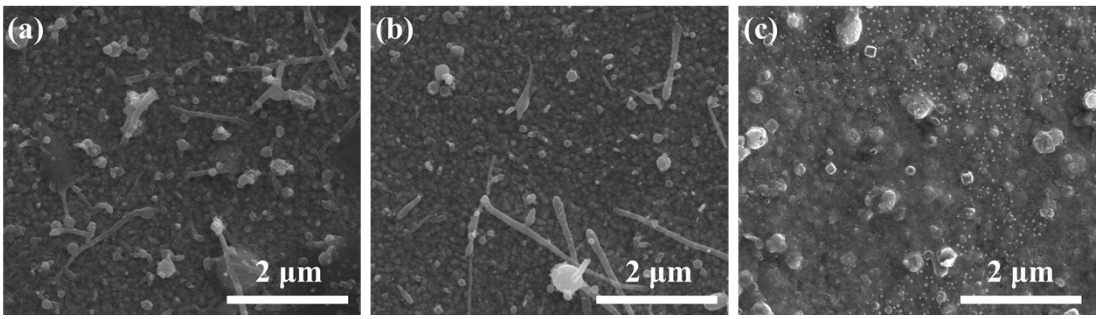

Figure S5 SEM of the samples after LSV measurement. (a) Fe_2TiO_5; (b) Zn@ Fe_2TiO_5; (c) $FeNi(OH)_x$/Zn@ Fe_2TiO_5.

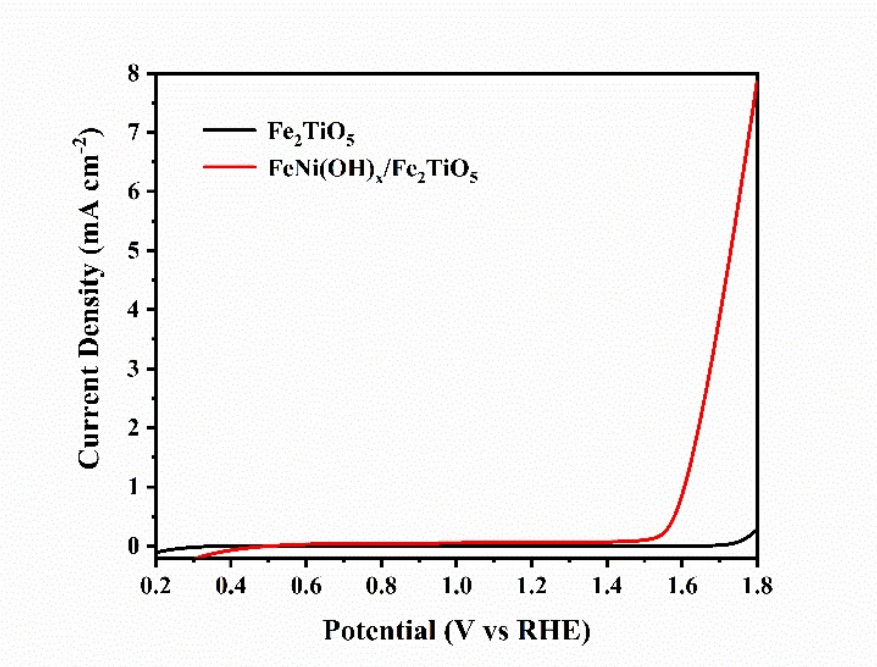

Figure S6 Current density of Fe_2TiO_5 and FeNi(OH)x/Zn@Fe_2TiO_5 under dark condition.

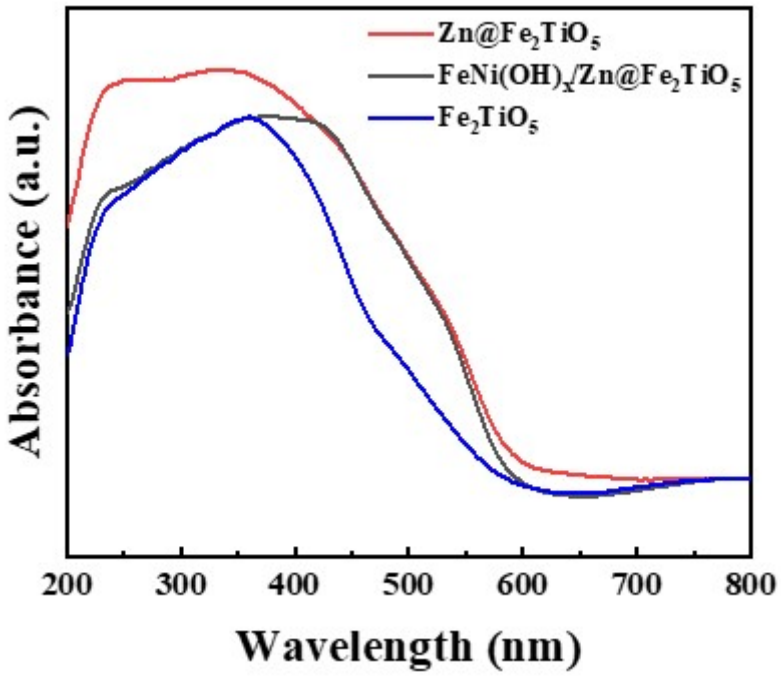

Figure S7 UV-vis spectra of the three samples.