Supplementary Data

Nickel(II)-Ethylenediamine Tetraacetic Acid Sensitized Silicon Nanowires Array: Efficient Cocatalyst-Free Photocatalyst for Photocatalytic Hydrogen Generation under Simulated Sunlight Irradiation

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Supplementary Fig. S1

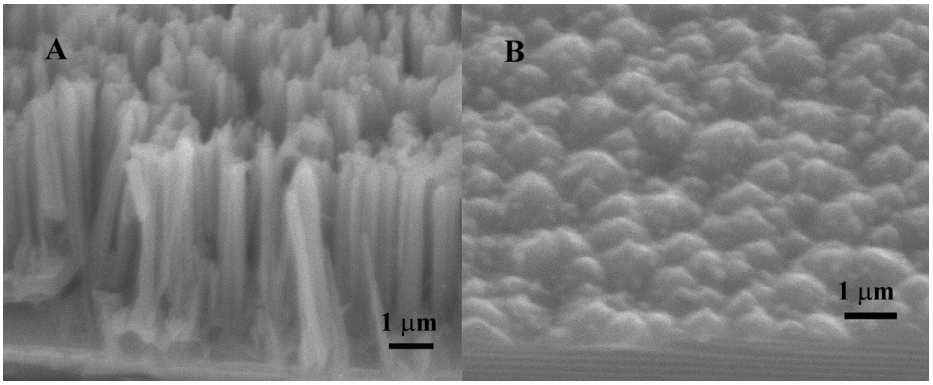

Fig. S1. SEM images of the SiNWs after irradiated in (A) the pH 11 EDTA-Ni solution or (B) the pH 13 EDTA-Ni solution for 5 h.

Supplementary Fig. S2

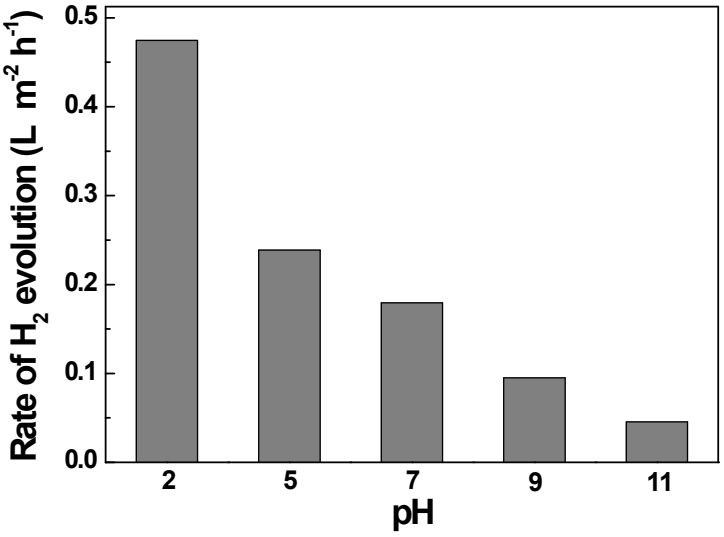

Fig. S2. Effect of pH on the photocatalytic activity of SiNWs (SiNWs: 3 cm × 3 cm; length of nanowires: 4 μm; EDTA-Na aqueous solution: 0.1 mol·L^{-1} 100 mL; irradiation time: 5 h)

Supplementary Fig. S3

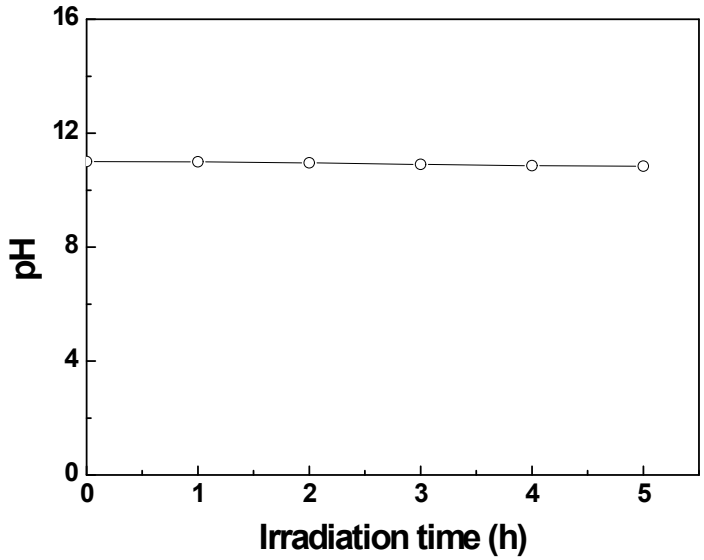

Fig. S3. Time-dependent pH of EDTA-Ni solution during hydrogen evolution (SiNWs: 3 cm × 3 cm; length of nanowires: 4 μm; EDTA-Ni aqueous solution: 0.025 mol·L^{-1} 100 mL; initial pH: 11; irradiation time: 5 h).