Supplementary Information

Engineering an Effective Noble-Metal-Free Photocatalyst for Hydrogen Evolution: Hollow Hexagonal Porous Micro-rod Assembled by In_2O_3@Carbon Core-Shell Nanoparticles

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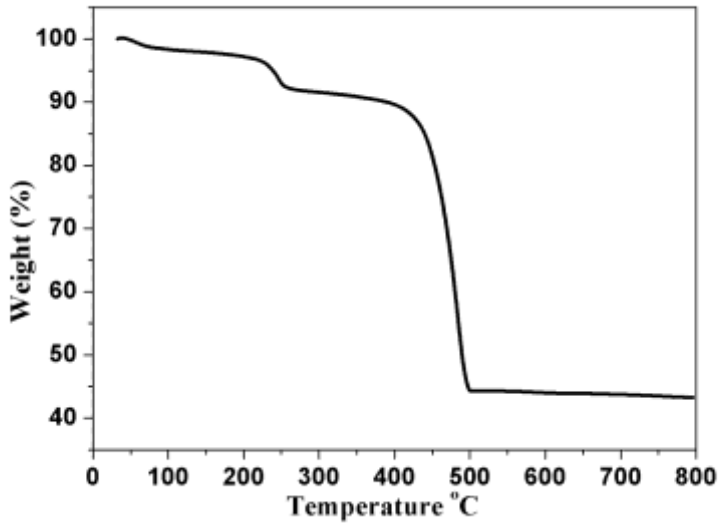

Figure S1. TGA curves of the as-obtained In-MIL-68 hexagonal micro-rods precursor.

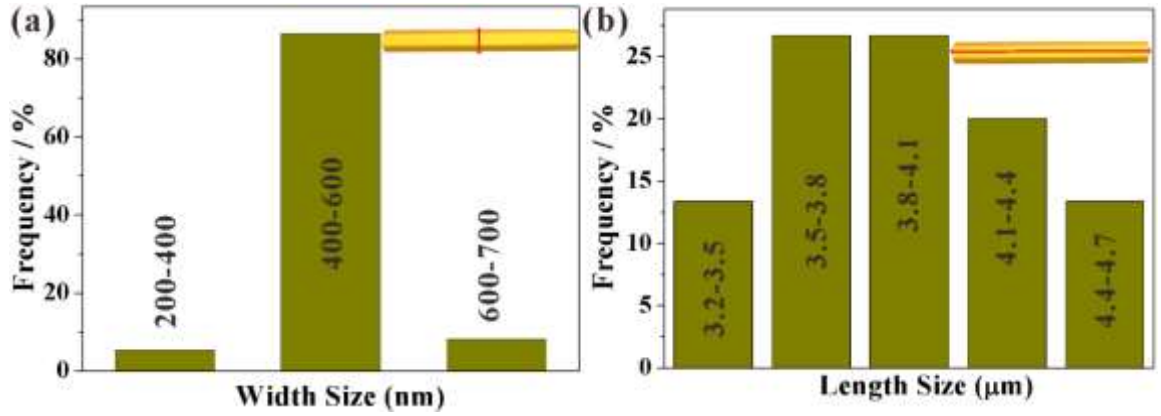

Figure S2. The sizes of In-MIL-68 hexagonal micro-rods precursor.

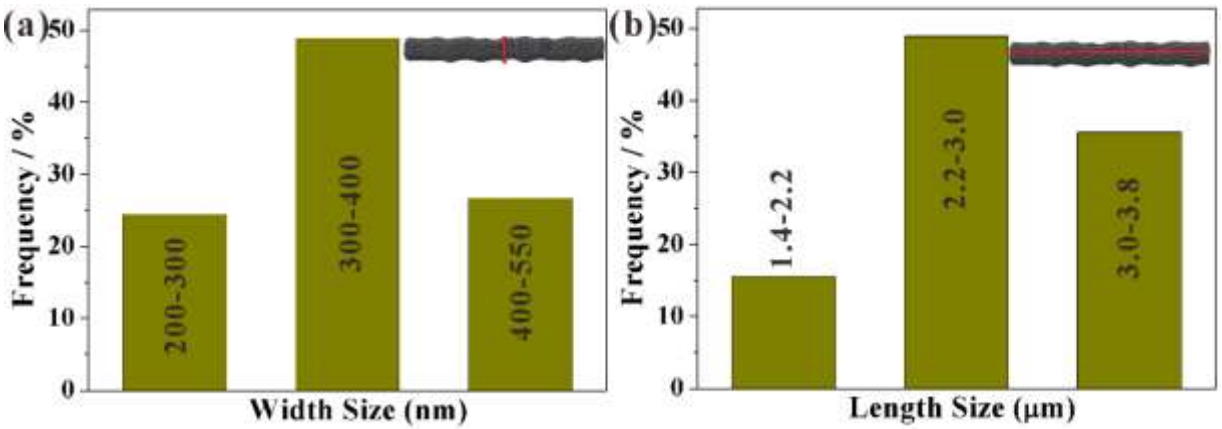

Figure S3. The sizes of PHIC particles.

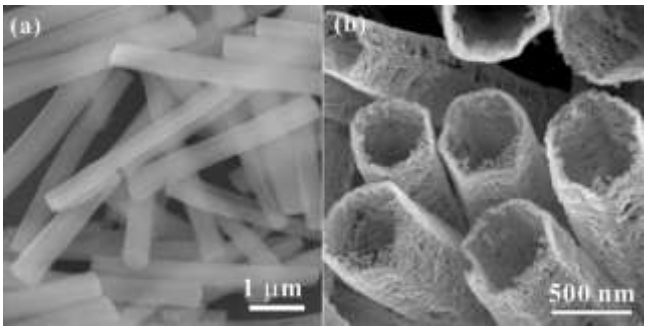

Figure S4. Magnified SEM image of In-MIL-68 precursors and PHIC.

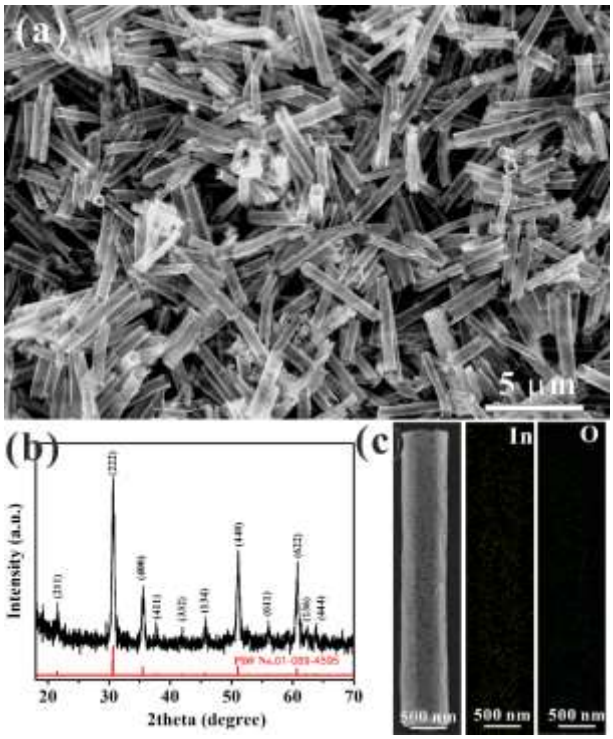

Figure S5. (a) SEM image of PHI, (b) XRD pattern of PHI, and (c) Corresponding elemental mapping.

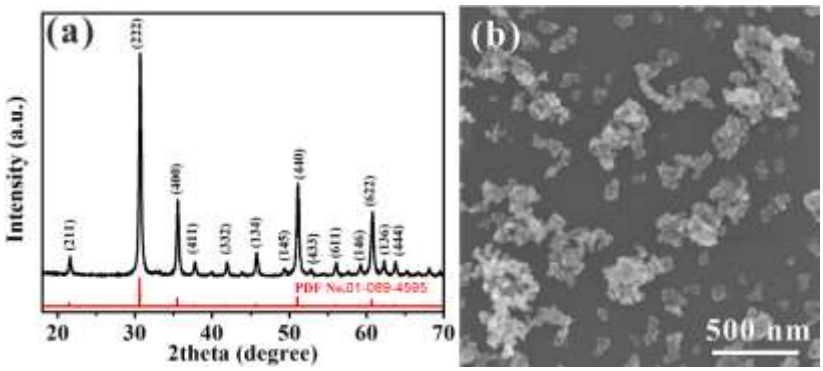

Figure S6. (a) XRD pattern of commercial In_2O_3, and (b) SEM image of commercial In_2O_3.

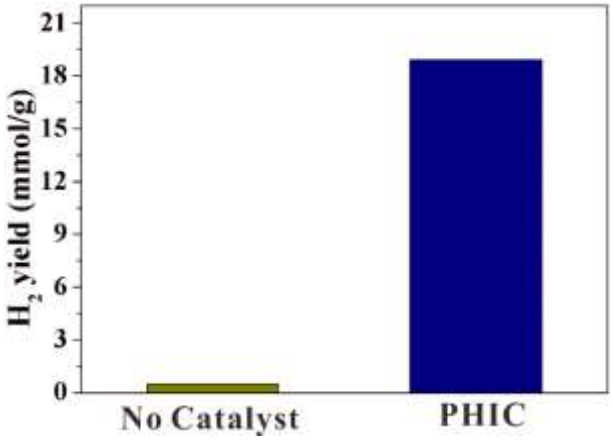

Figure S7 Mass-normalized H_2 yield for 7 h over No catalyst and PHIC.

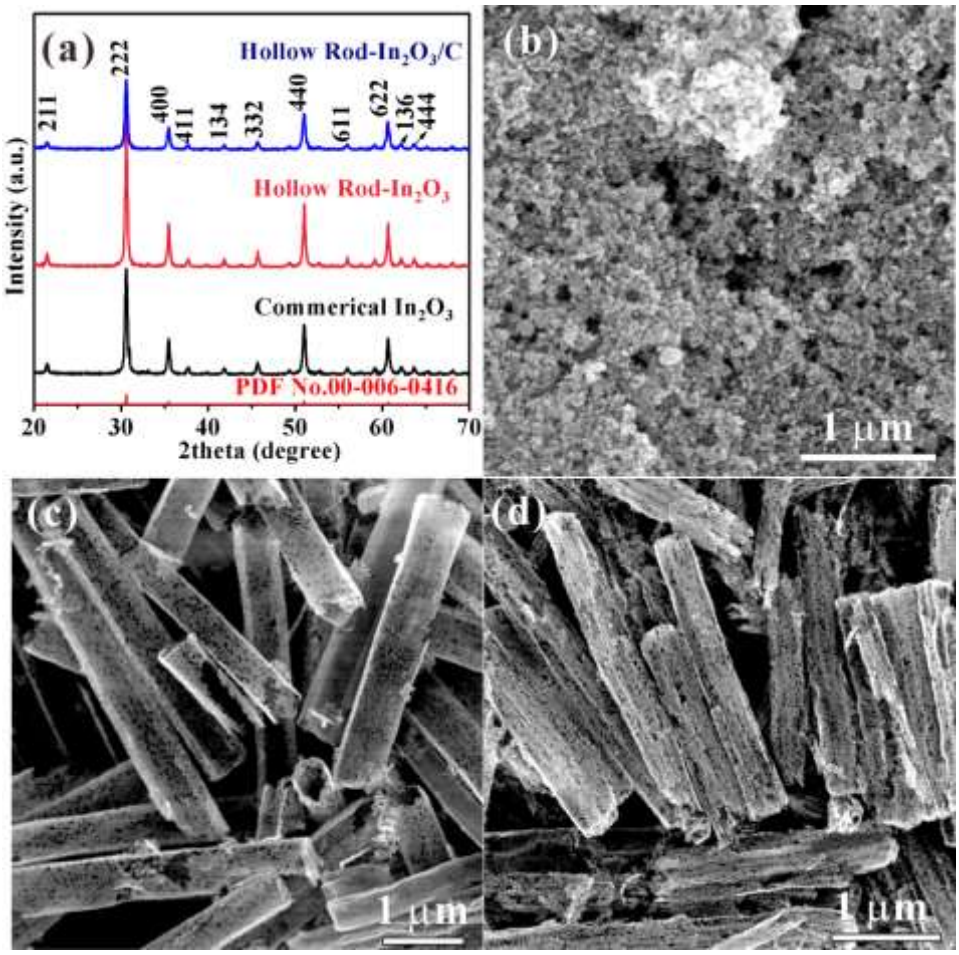

Figure S8 XRD patterns three kinds of In_2O_3 samples after catalytic reaction, SEM image of (b) commercial In_2O_3 nanoparticles, (c) hollow In_2O_3 rods, (d) hollow In_2O_3/C rods.

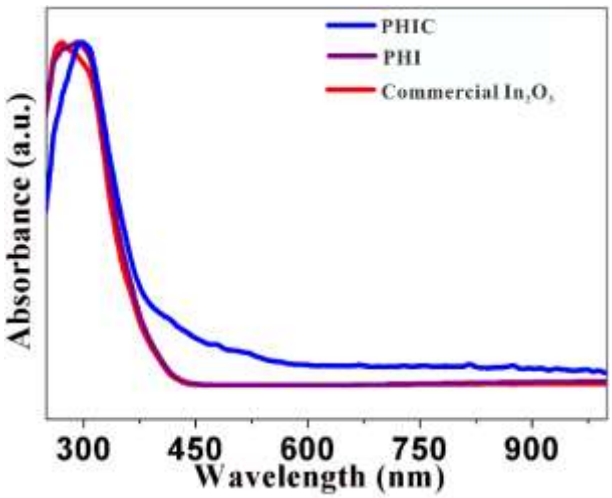

Figure S9. UV-vis absorption spectra of PHIC, PHI, and commercial In_2O_3.

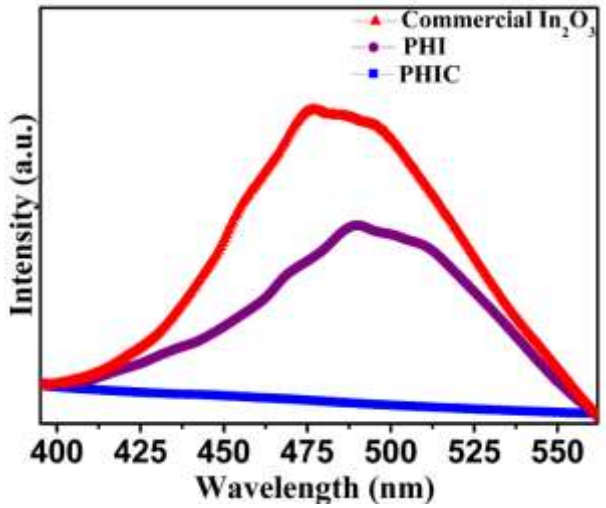

Figure S10. Photoluminescence spectra of commercial In_2O_3, PHI, and PHIC.

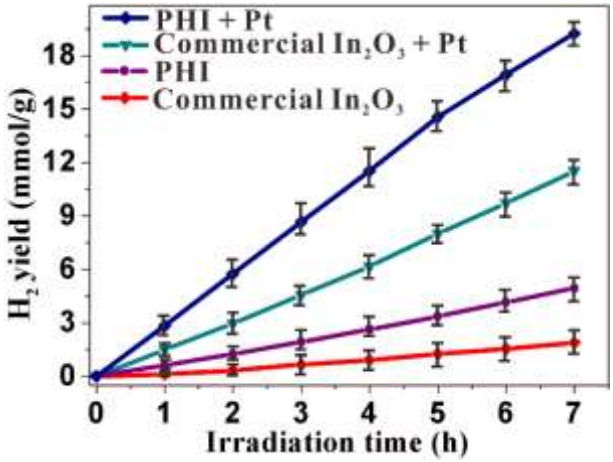

Figure S11. Comparison of the photocatalytic H_2 evolution of PHI and commercial

In_2O_3 with Pt and without Pt.