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Supporting information

Light Trapping by Porous TiO_2 Hollow Hemispheres for High Efficient Photoelectrochemical Water Splitting

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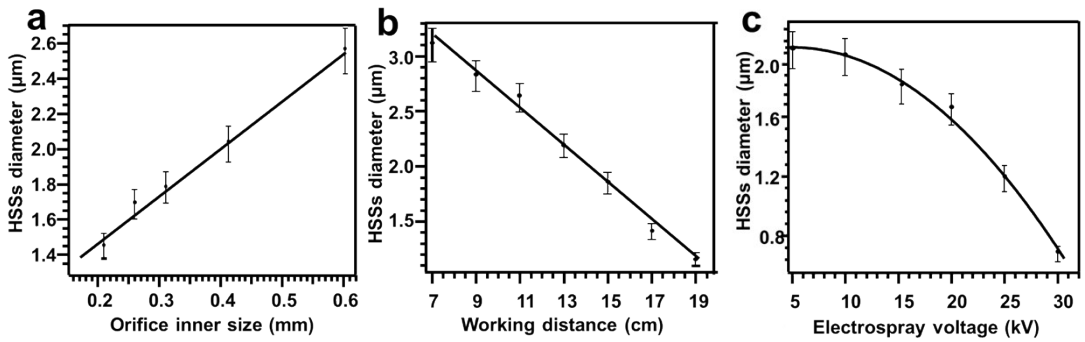

Figure S1. The average outer diameter of the HHSs as a function of (a) the orifice inner size, (b) the distance between the end of the orifice and the collector, and (c) the applied voltage.

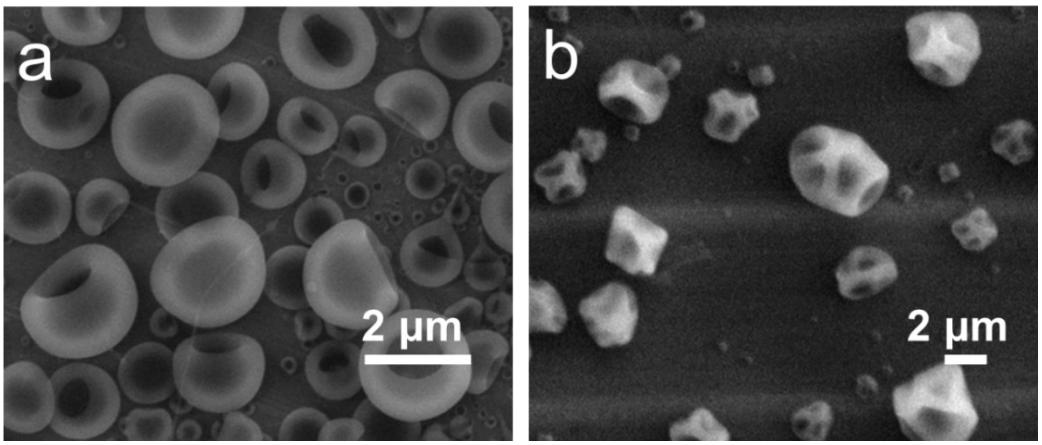

Figure S2. The morphology of as-prepared TTIP/HHSs prepared by various TTIP concentrations of (a) 4 wt% and (b) 6 wt%.

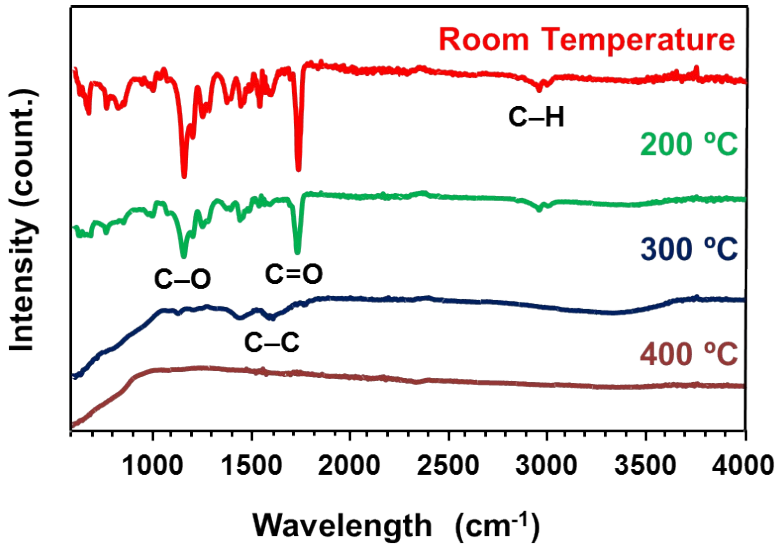

Figure S3. Thermal degradation of the PMMA/TTIP HHSs film using FITR-ATR at room temperature, 200 ºC, 300 ºC, and 400 ºC.

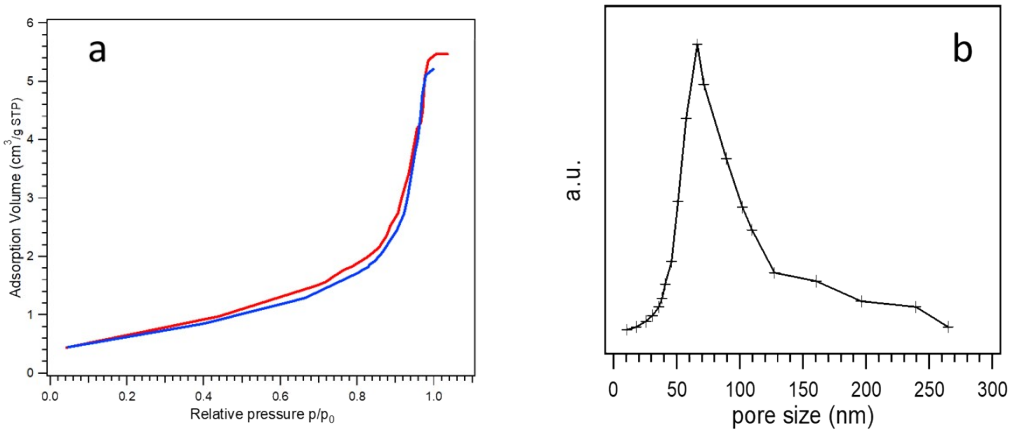

Figure S4. (a) N_2 adsorption–desorption isotherms and (b) their BJH pore size distribution plots of TiO_2 HHS.

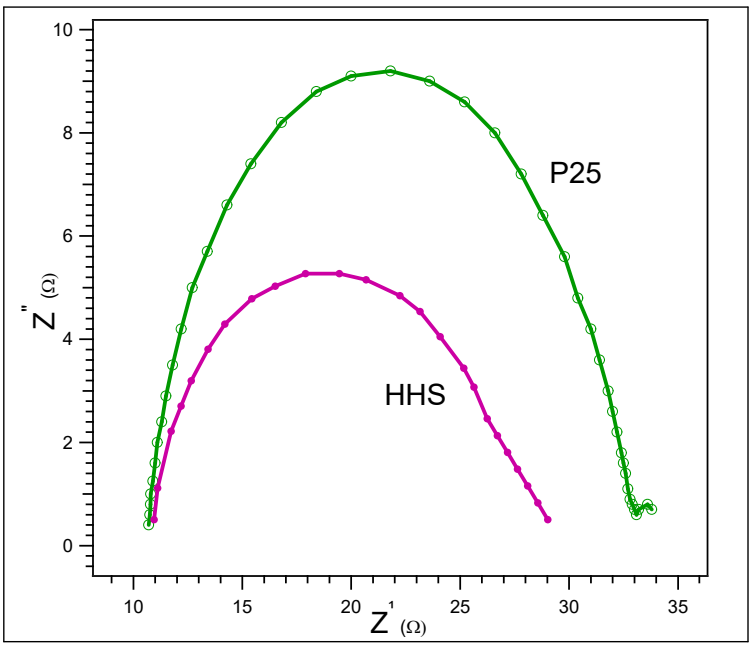

Figure S5. Nyquist plot of TiO_2 HHS and P25.

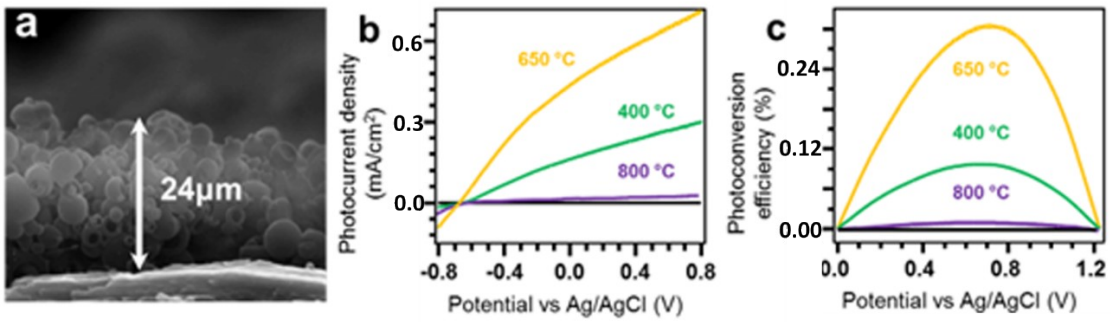

Figure S6. (a) The cross-sectional view of the TiO_2 HHSs film for the photoreaction studies. (b) The photocurrent density of the TiO_2 HHSs film after calcination at 400 ºC, 650 ºC, and 800 ºC and (c) the corresponding photoconversion efficiency.