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## The Fabrication and the Characterization of $TiO_2/Titan$ ate Nanohybrid for Efficient Hydrogen Evolution

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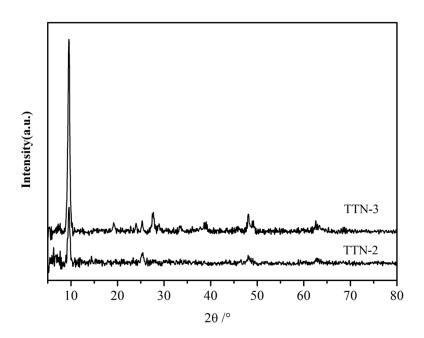
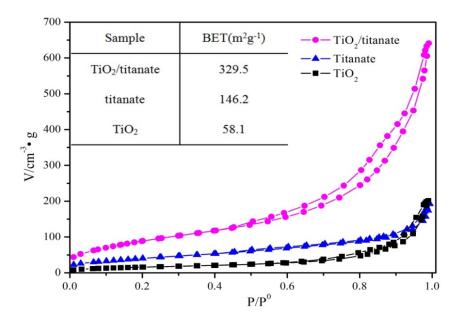


Figure S1. X-ray diffraction patterns of different products including TTN-2 and TTN-3



**Figure S2.** The  $N_2$  adsorption-desorption isotherms and the corresponding specific surface area (inset) of  $TiO_2$ /titanate (TTN-1), titanate and  $TiO_2$ .

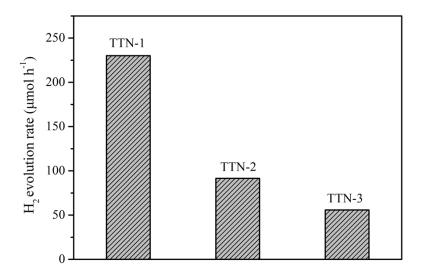


Figure S3. Photocatalytic  $H_2$  evolution performance of different products including TTN-1, TTN-2, and TTN-3 under UV light irradiation.