Supporting Information

Understanding the Growth and Photoelectrochemical Properties of Mesocrystals and Single Crystals: A Case of Anatase TiO_2

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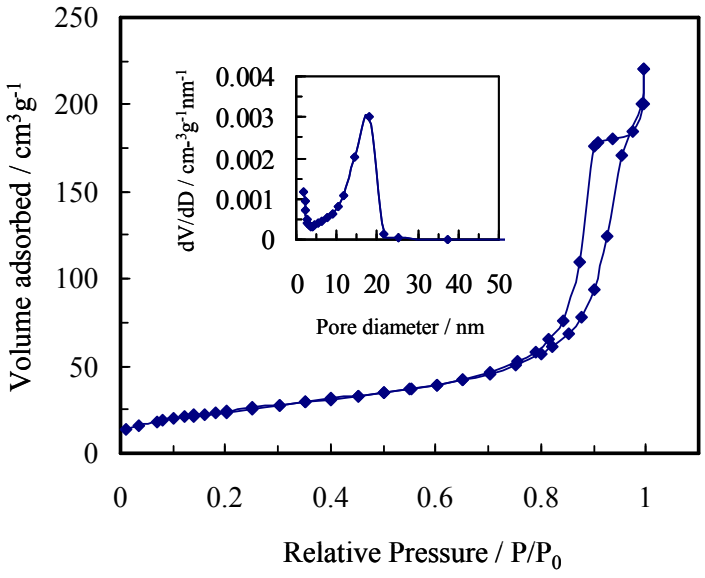

Fig. S1 N_2 adsorption-desorption isotherms of the TiO_2 mesocrystals. The insets show the BJH pore size distribution.

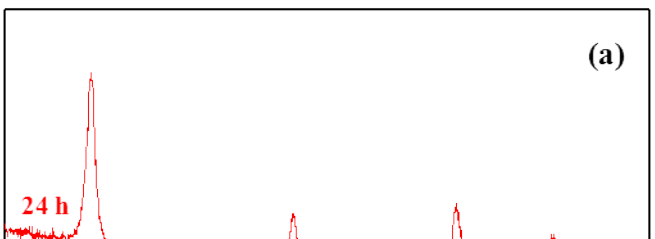

Fig. S2 XRD patterns of the precipitates obtained at different reaction times under (a) solvothermal and (b) hydrothermal conditions. The JCPDS patterns in (a) and (b) are anatase TiO_2 and TiO_2-B, respectively.

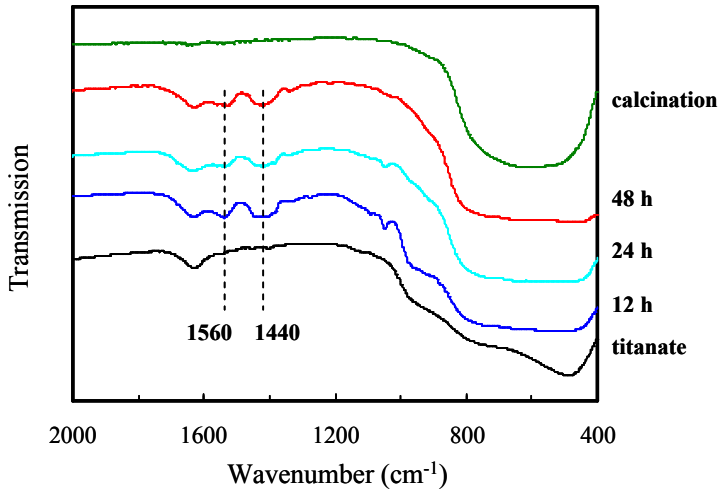

Fig. S3 FTIR patterns of titanate precursor and the precipitates obtained at different reaction times under solvothermal conditions, as well as the precipitate obtained after 48 h of reaction and 30 min of calcination at 400 ºC.

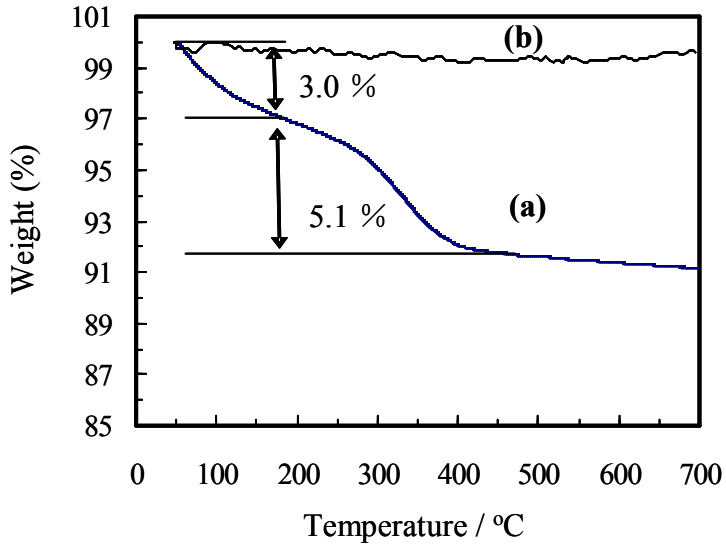

Fig. S4 TGA curves of the as-precipitated TiO_2 mesocrystals (a) and single crystals (b) synthesized at 200 ºC under solvothermal and hydrothermal conditions.

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