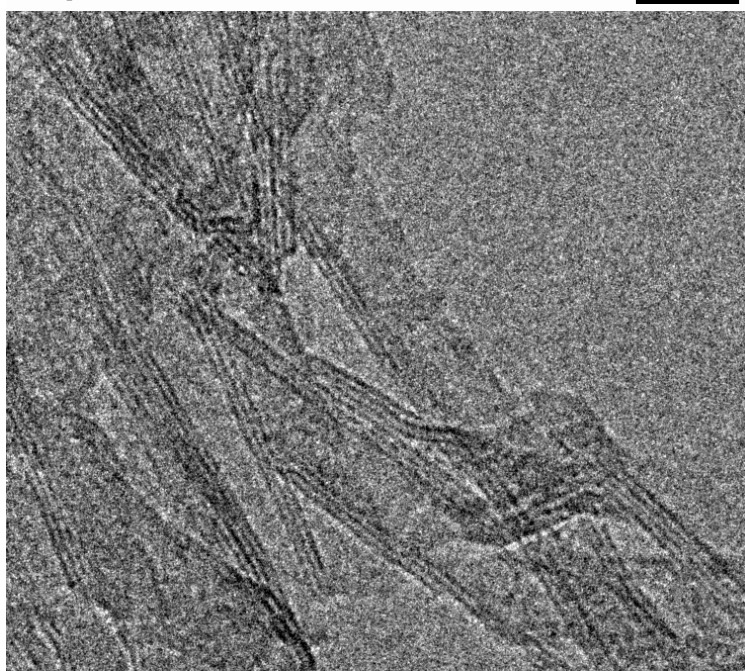


**a)**

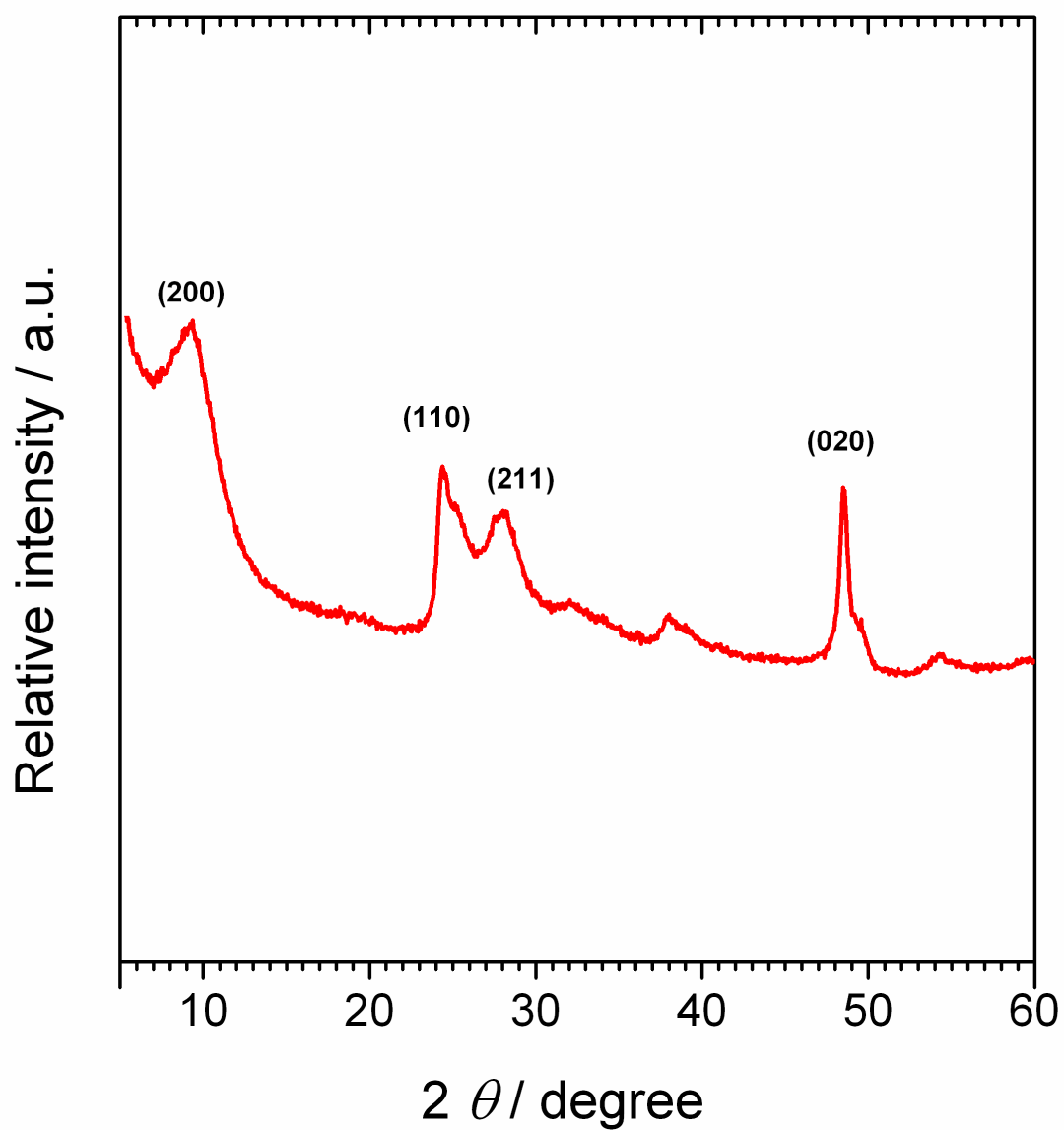
**10 nm**



**b)**

**10 nm**

**Figure S1.** TEM images of (a) microstructured amorphous  $\text{TiO}_2$  obtained via sol-gel hydrolysis of  $\text{Ti}(i\text{-OPr})_4$  inside sea urchin templates and (b) hierarchical titanate nanotubes obtained from  $\text{TiO}_2$  microstructures via alkaline hydrothermal route. TEM images were obtained using a JEOL 3010-TEM transmission electron microscope.



**Figure S2.** Typical XRD pattern of hierarchical titanate nanotubes obtained by alkaline hydrothermal treatment of ordered microstructured amorphous  $\text{TiO}_2$ . Miller indexes correspond to the tri-titanic acid  $\text{H}_2\text{Ti}_3\text{O}_7$ .