

Supporting information

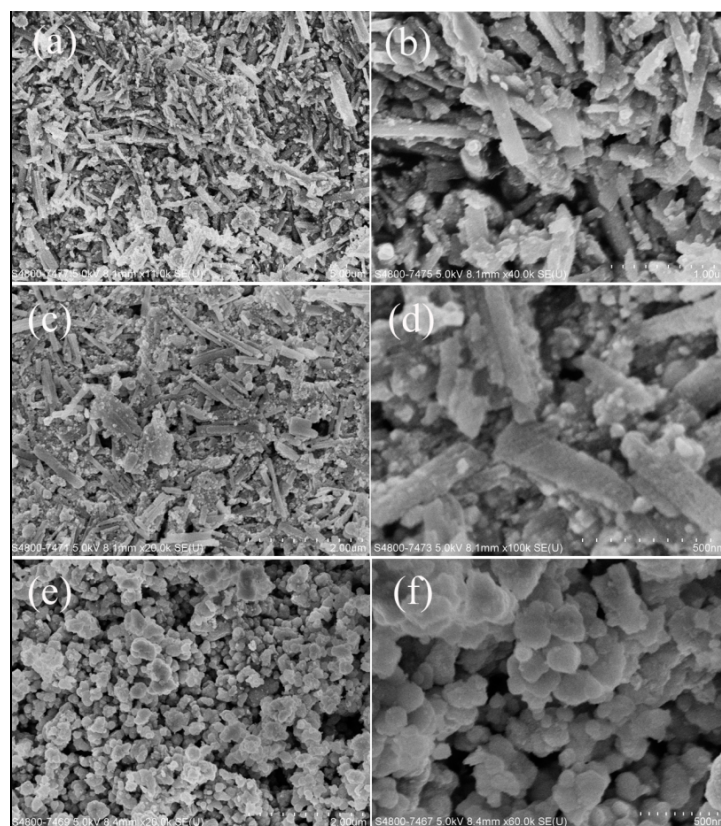


Figure S1. SEM images of the composites structures of SnO_2 nanoparticles and tin titanate nanowires obtained by hydrothermal treatment of (a, b) 100mg, (c, d) 50mg and (e, f) no H-titanate nanowires in aqueous SnCl_2 precursor solution.

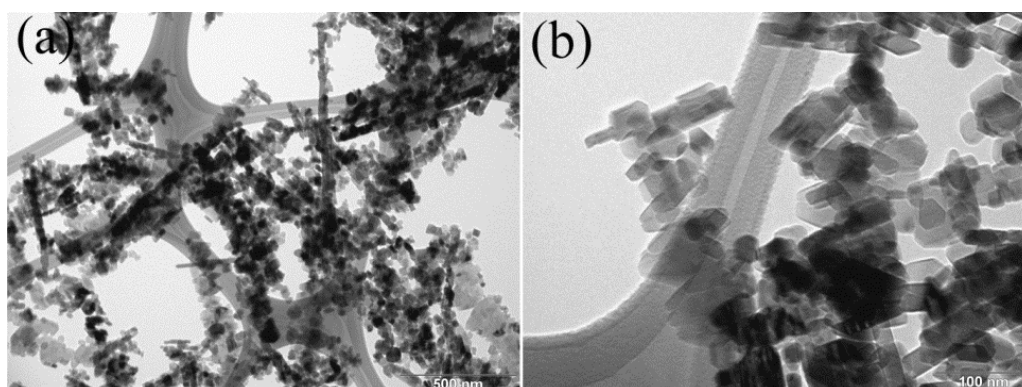


Figure S2. TEM images of anatase TiO_2 obtained by hydrothermal treatment of H-titanate nanowires without presence of SnCl_2 in the precursor solution.

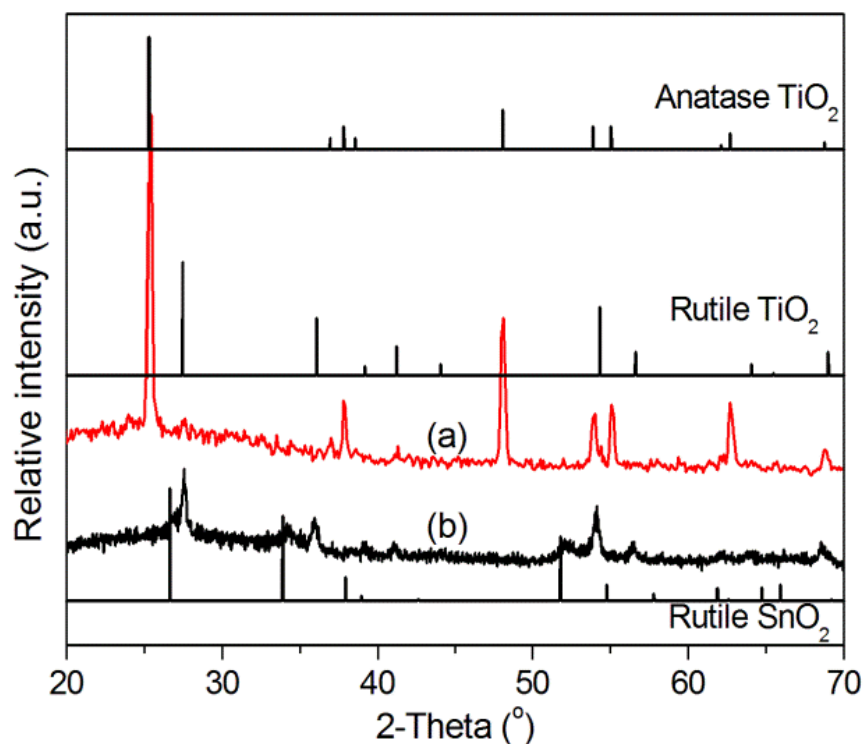


Figure S3. XRD patterns of (a) anatase TiO_2 obtained by sintering H-titanate nanowire precursors at 800°C for 6h and (b) rutile SnO_2 and Sn-doped TiO_2 obtained by sintering tin titanate nanowires coupled with SnO_2 nanoparticles at 600°C for 6h.

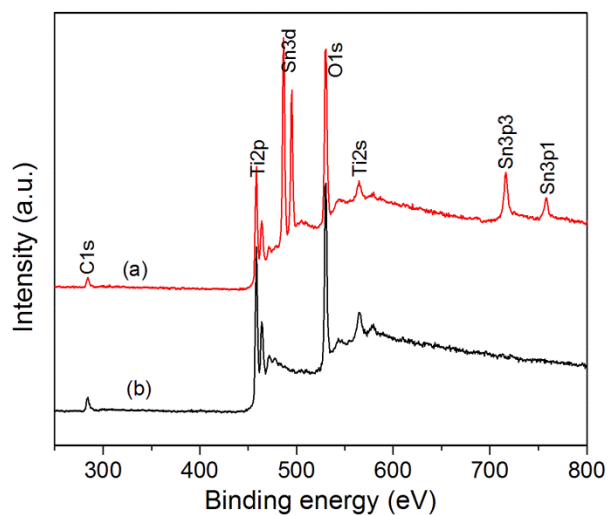


Figure S4. XPS spectra of (a) SnO_2 /tin titanate nanowires (200 mg H-titanate precursor) and (b) H-titanate nanowires.

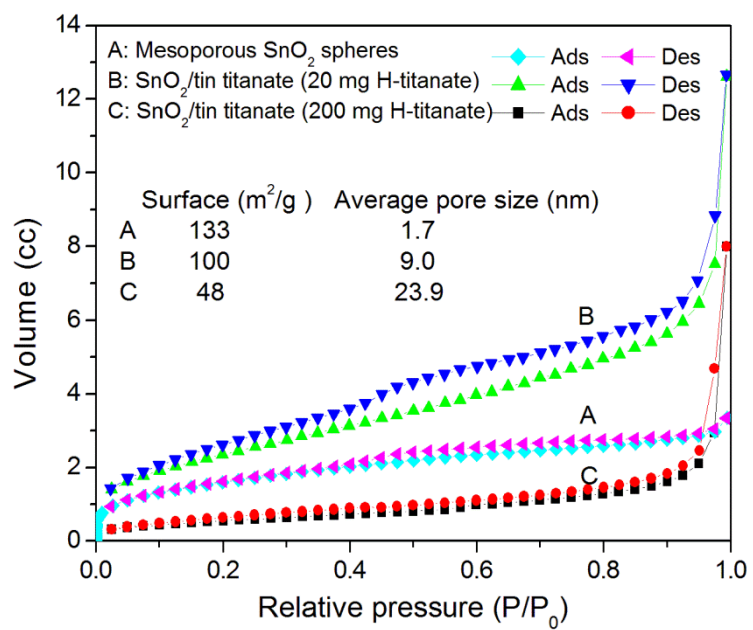


Figure S5. N₂ adsorption-desorption isotherms of porous SnO₂ spheres (A) and SnO₂/tin titanate nanowires with different H-titanate nanowires introduced (B: 20 mg; C: 200 mg).