

Additional file 1

The “surface unmodified TiO₂” that refers to uncoated rutile nanoparticles. They have been prepared by a simple route involving the hydrolysis of TiCl₄ solution in hydrochloric acid (Pottier, A. et al. *Journal of Materials Chemistry* **2001** 11(4) 1116-1121). TEM micrograph of thus prepared particles (**Figure S1**) shows a rodlike morphology. Nanorods are quite polydispersed in size with an average length L of 120 nm and average diameter D of 20 nm (aspect ratio $L/D=6$). Details have been added in the manuscript.

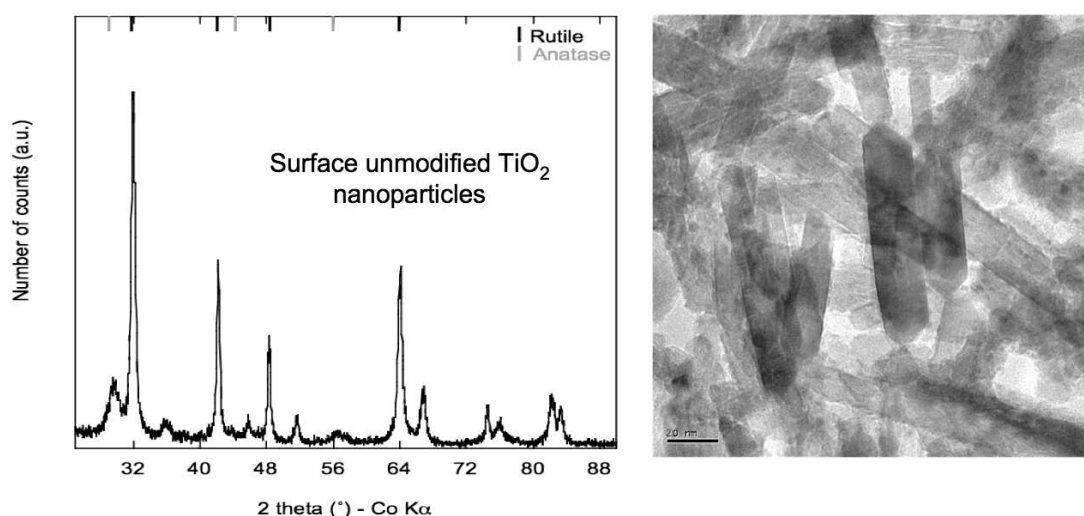


Figure S1. Physico-chemical characterization of the surface unmodified TiO₂ nanoparticles. (right) TEM image of rutile nanorods prepared by thermolysis of TiCl₄ suspension. Rutile nanorods were elongated along the [101] direction, (left) X-ray diffraction pattern of the pure rutile nanorods.