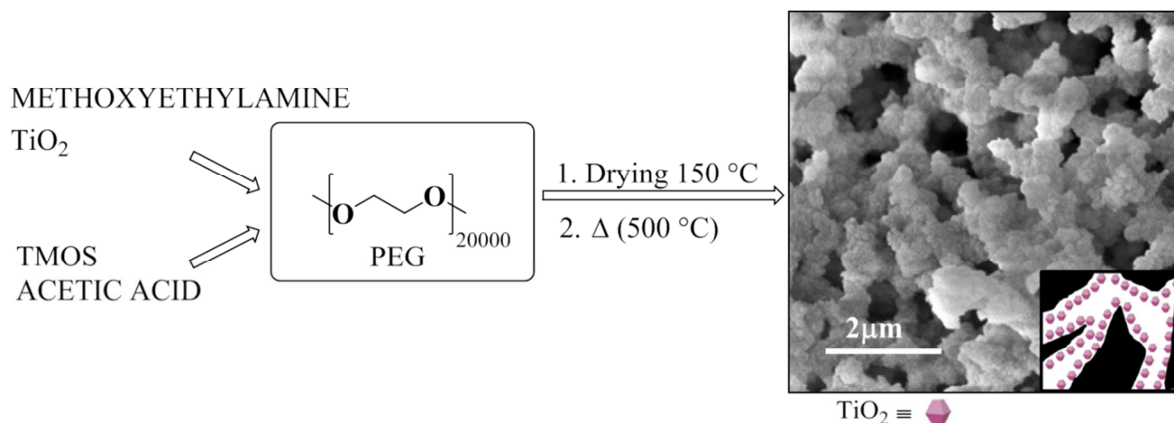


# Supporting Information

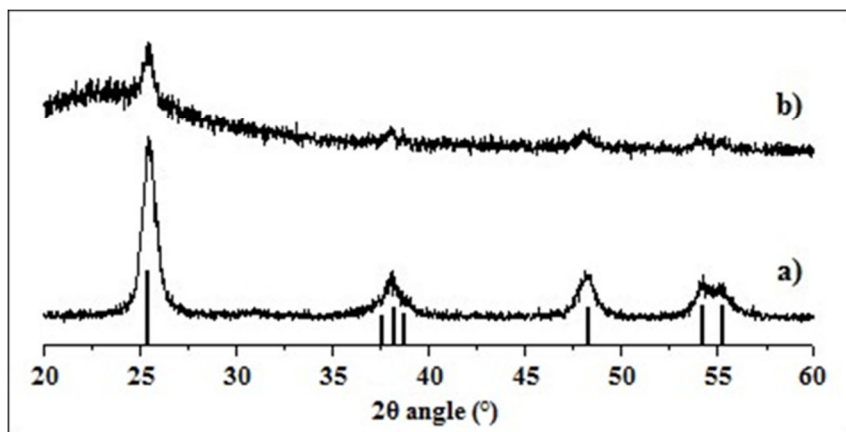
## Efficacy of the Reactive Oxygen Species Generated by Immobilized $\text{TiO}_2$ in the Photocatalytic Degradation of Diclofenac

B. Di Credico <sup>a\*</sup>, I.R. Bellobono <sup>b</sup>, M. D'Arienzo <sup>a</sup>, D. Fumagalli <sup>a</sup>, M. Redaelli <sup>a</sup>, R. Scotti <sup>a</sup> and F. Morazzoni <sup>a</sup>

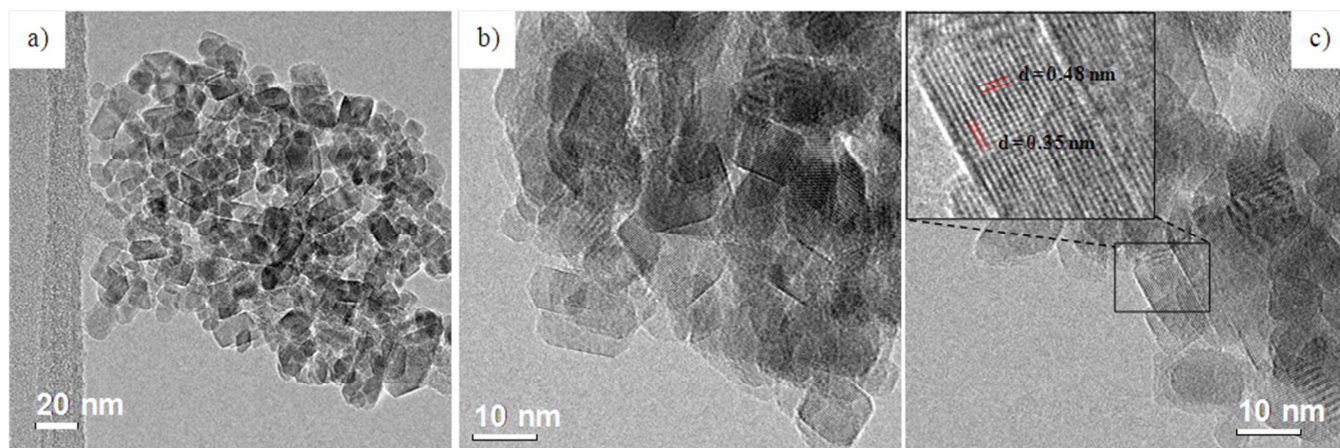
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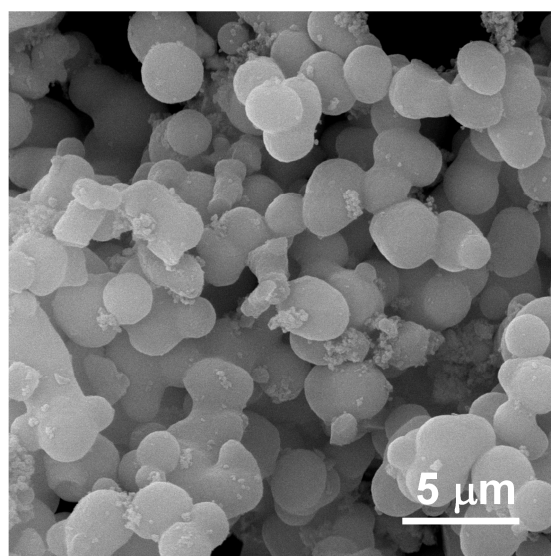
**FIGURE S1:** Schematic representation of overall synthetic process of TS composite material and related SEM image. Schematic picture of obtained TS catalyst is shown in the inset of the SEM image.



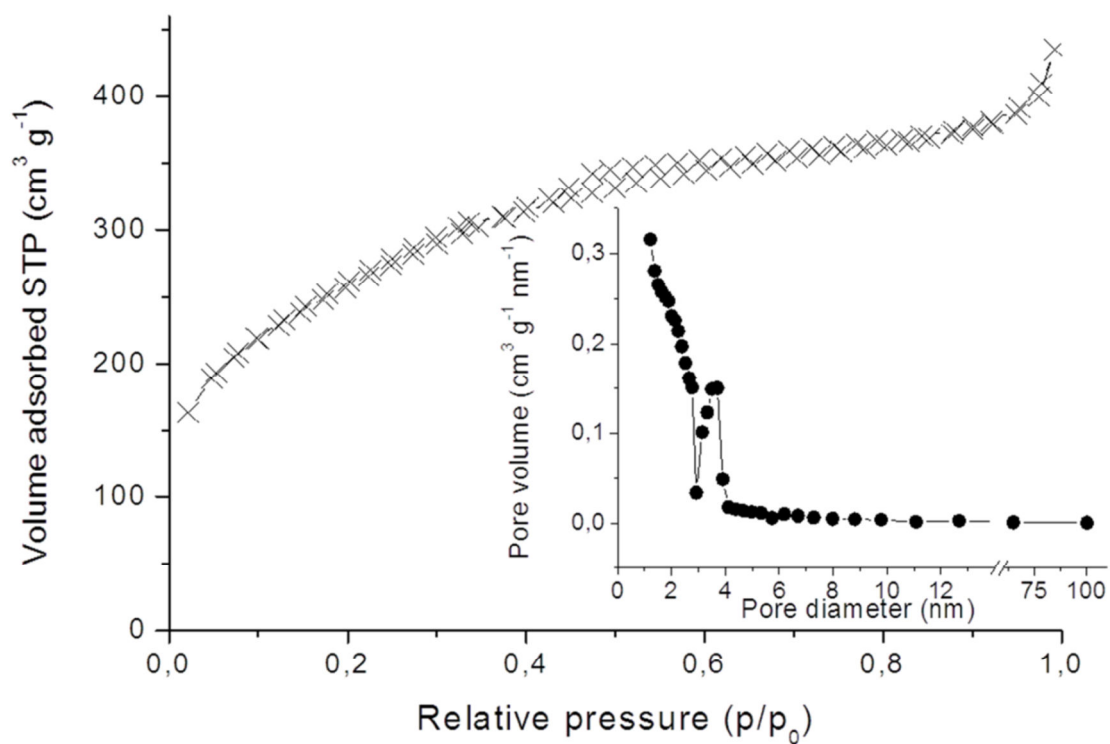
**FIGURE S2:** X-ray diffraction patterns of both (a) anatase TiO<sub>2</sub> and (b) TS powders.



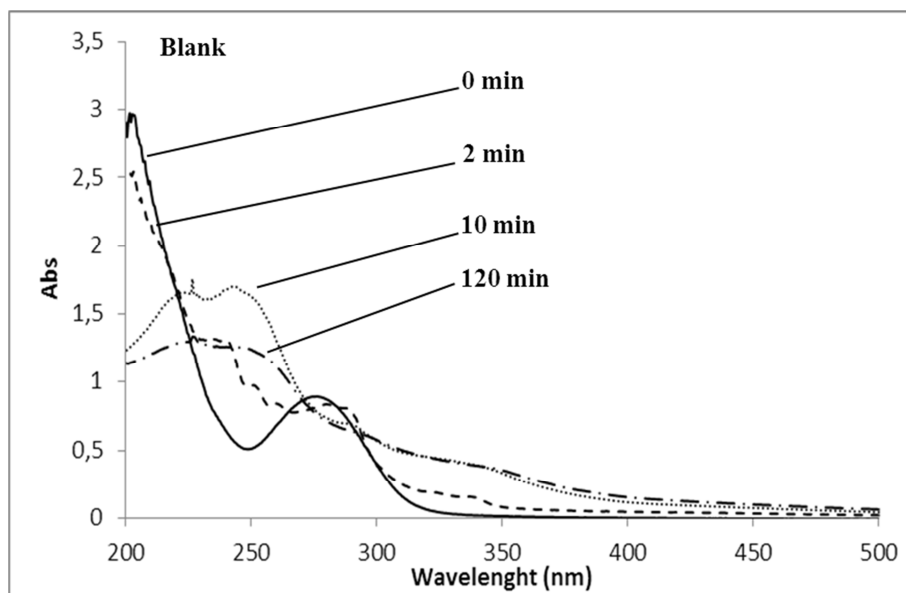
**FIGURE S3:** TEM (a, b) and HRTEM (c) images of TiO<sub>2</sub> anatase nanocrystals. Inset in c) highlight the crystallographic planes.



**FIGURE S4:** SEM micrograph of TS composite.



**FIGURE S5:** Nitrogen physisorption isotherm of TS sample. The pore size distribution is showed in the inset.



**FIGURE S6:** Selected absorption spectra of DCF recorded at different reaction times without catalyst (Blank). [DCF (solid line), with photoreaction spectra after 2 min.(dashed line), 10 min. (dotted line), 120 min. (dotted-dashed line)].