Supporting Information for

Reduced Graphene Oxide as Capturer of Dyes and Electrons during Photocatalysis: Surface Wrapping and Capture Promoted Efficiency

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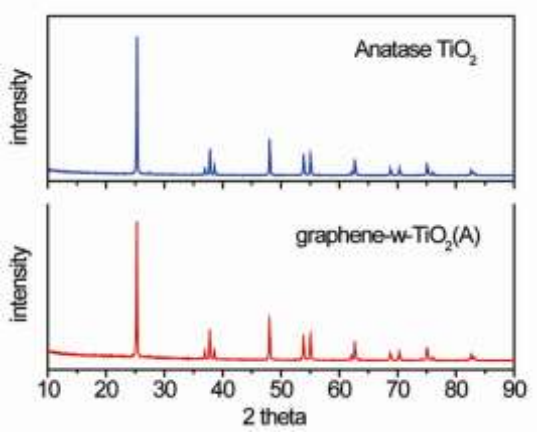

Figure S1. XRD pattern of graphene-w-TiO_2 and anatase TiO_2 control. Here, graphene-w-TiO2 was referred as to graphene-w-TiO_2 (A) at the bottom.

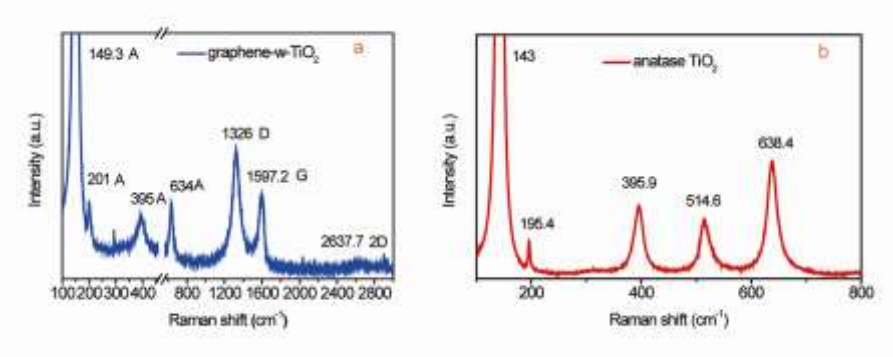

Figure S2. Raman spectra of graphene-w-TiO_2 and Anatase TiO_2 control. Exciting source: 635 nm laser.

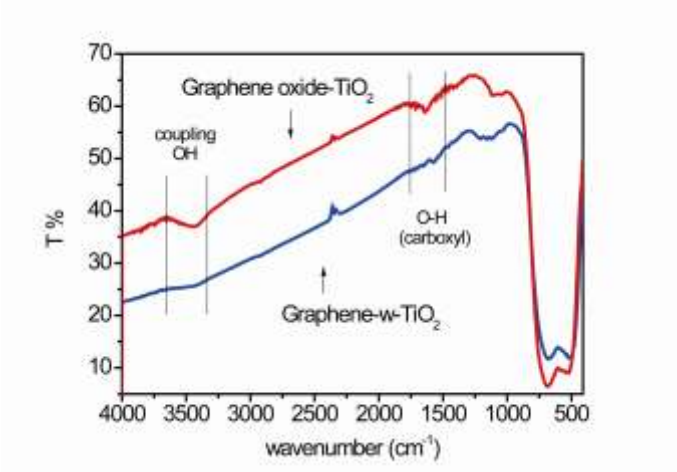

Figure S3. FTIR spectra of the Graphene-w-TiO_2 and Graphene oxide-TiO_2 (measured as KBr pellets).

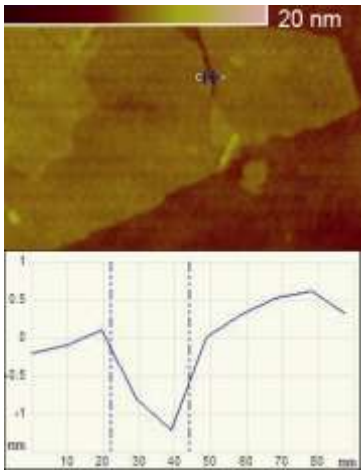

Figure S4. AFM image of graphene oxide, at the bottom is the typical height profile of exfoliated graphene oxide.

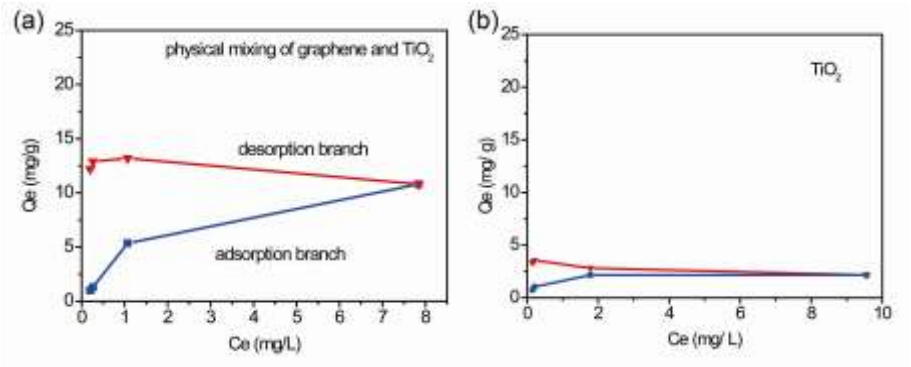

Figure S5. The adsorption-desorption isotherm of physical mixing of graphene and TiO_2 (a) and TiO_2 (b). MB: 10 mg/L, 50 mL. Photocatalyst: 10 mg.

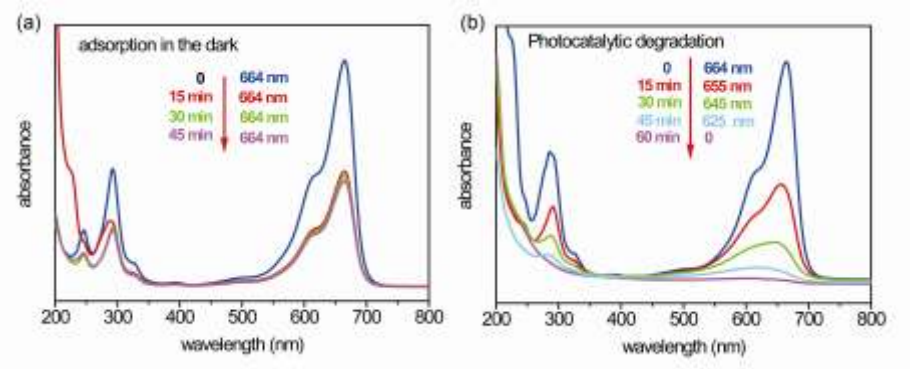

Figure S6. The change in optical absorption of MB solution: (a) the adsorption in the dark. (b) The photocatalytic degradation process.