

Supporting Information

Eco-friendly one-pot synthesis of ultradispersed TiO₂ nanocrystals/graphene nanocomposites with high photocatalytic activity for dye degradation

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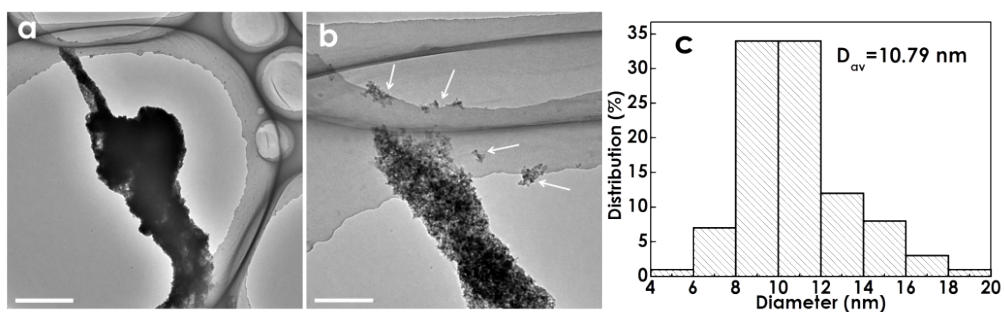


Figure S1. TEM images (a, b) of the TiO₂/graphene hybrids synthesized in the absence of glycerol and the corresponding particle size distribution of the TiO₂ nanoparticles (c). Scale bars: 1.0 μm for a, 200 nm for b.

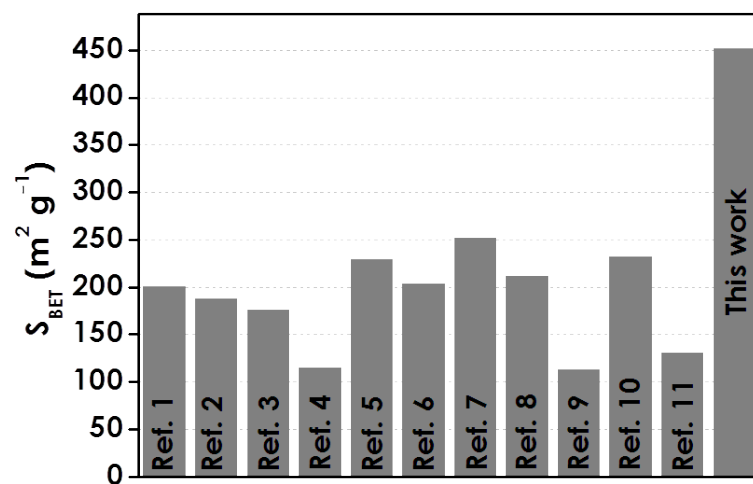


Figure S2. Comparison of BET surface areas of different TiO_2 /graphene hybrids reported in literatures.

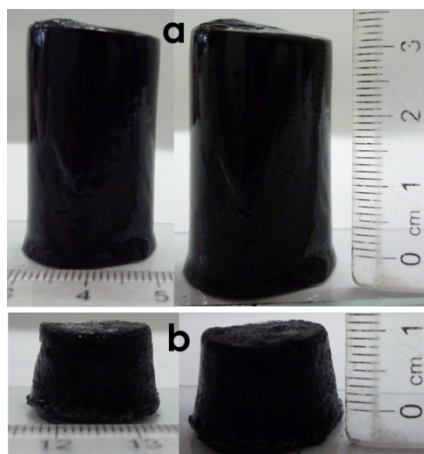


Figure S3. Digital photos of the graphene cylinder synthesized with (a) or without (b) glycerol.

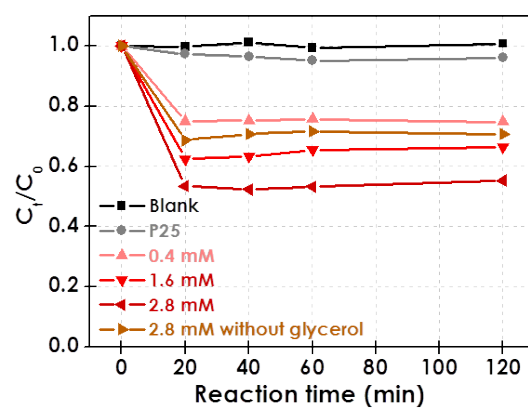


Figure S4. Adsorption curves of RhB by different samples.

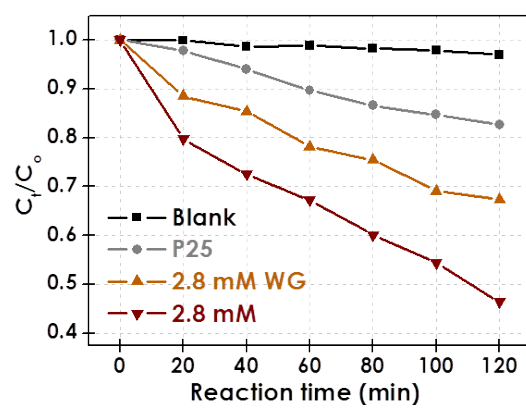


Figure S5 Photocatalytic degradation of MB by different samples.

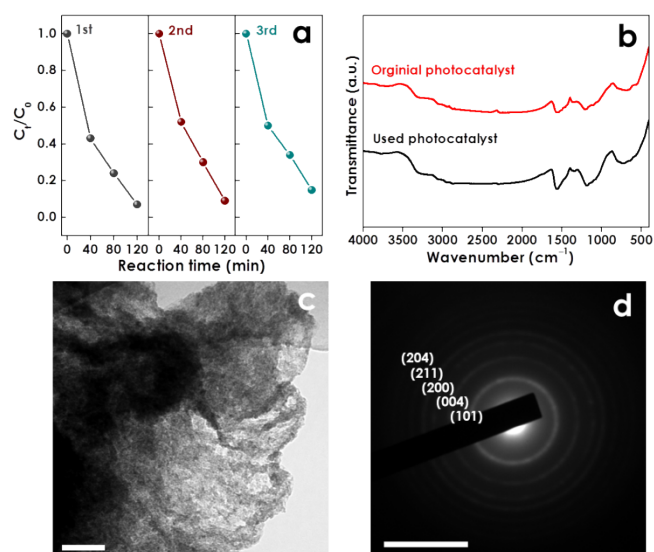


Figure S6 Cycling photodegradation of RhB for H-TiO₂/G (a). FTIR spectra of the catalyst (b). TEM image (c) and SEDA pattern (d) of the H-TiO₂/G after 3 cycles. Scale bars: 100 nm for c, 5 nm⁻¹ for d.

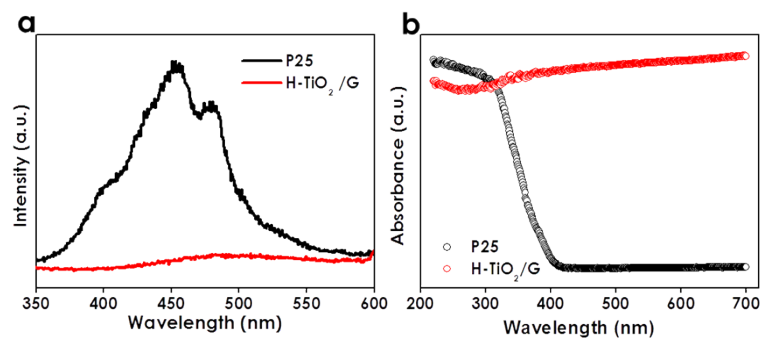


Figure S7 Photoluminescence spectra (a) and diffuse reflectance UV-Vis spectra (b) of different samples.