Supplementary Materials

Core/Shell Ag/SnO_2 Nanowires for Visible Light Photocatalysis

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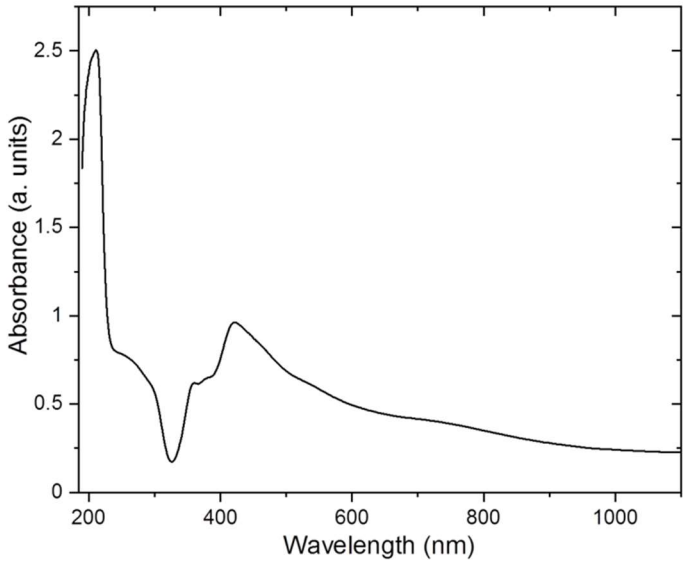

Figure S1. Absorbance spectra of core/shell Ag/SnO_2NWs.

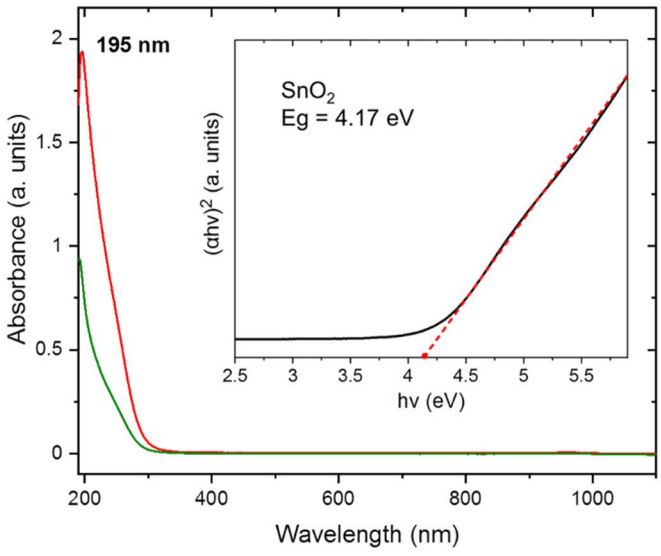

Figure S2. Absorbance spectra of SnO_2NPs at the concentrations of 2 and 0.66 mg/ml and (inset) Tauc plot for SnO_2 energy gap value determination.

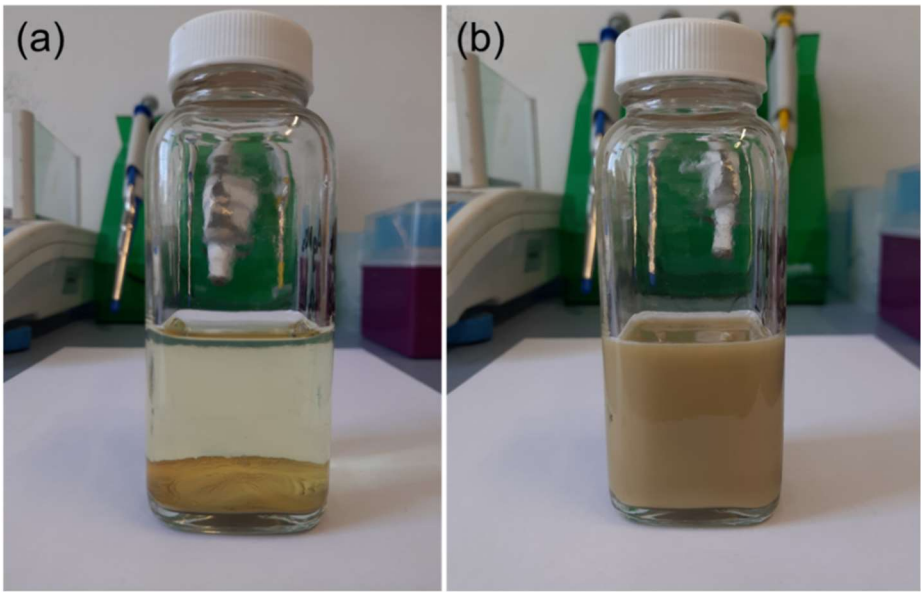

Figure S3. The images of an aqueous solution of Ag/SnO_2NWS (**a**) left for 48h for sedimentation and (**b**) then gently mixed to redisperse the core/shell nanowires.

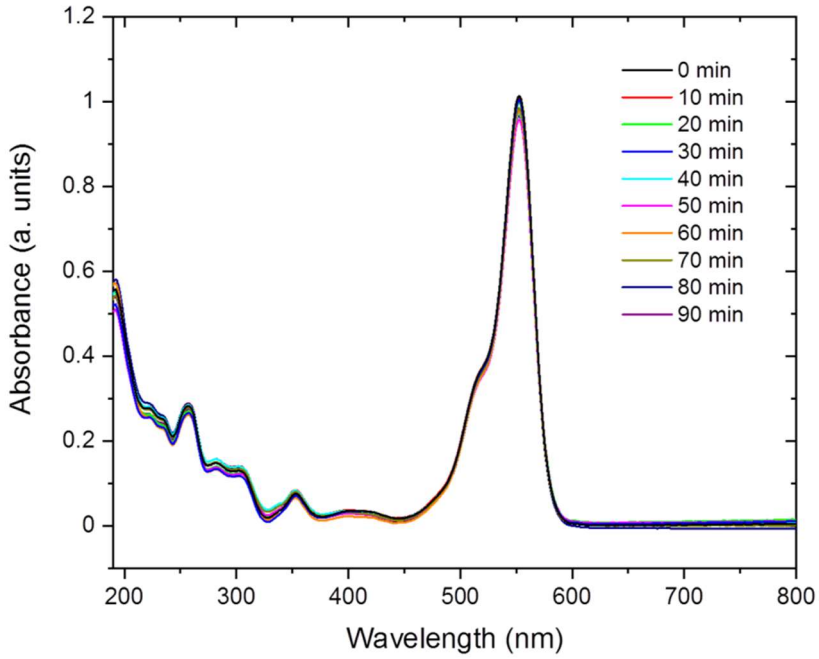

Figure S4. Absorbance spectra of rhodamine B without any irradiation after centrifugation of Ag/SnO_2NWs photocatalyst (dark experiment).

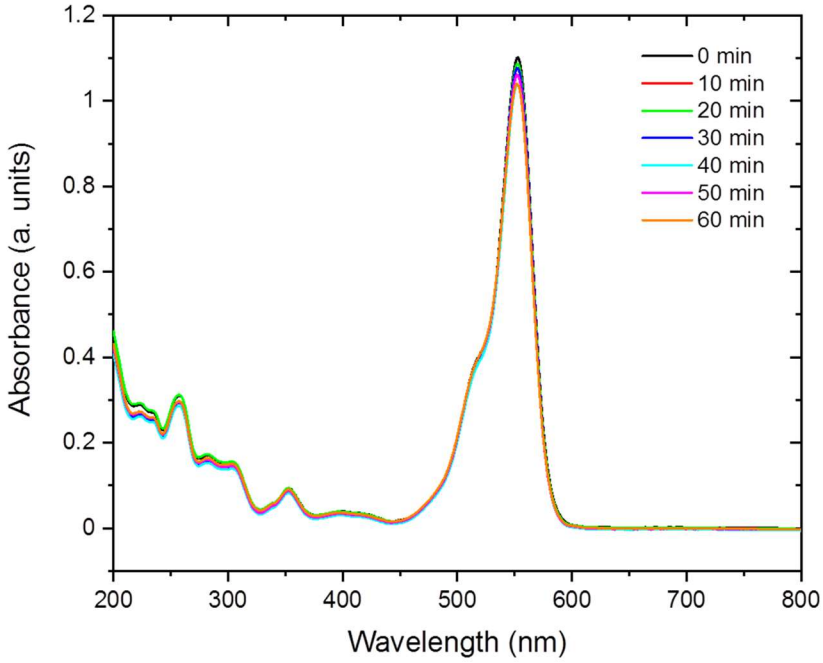

Figure S5. Absorbance spectra of rhodamine B irradiated under 359 nm without catalyst.

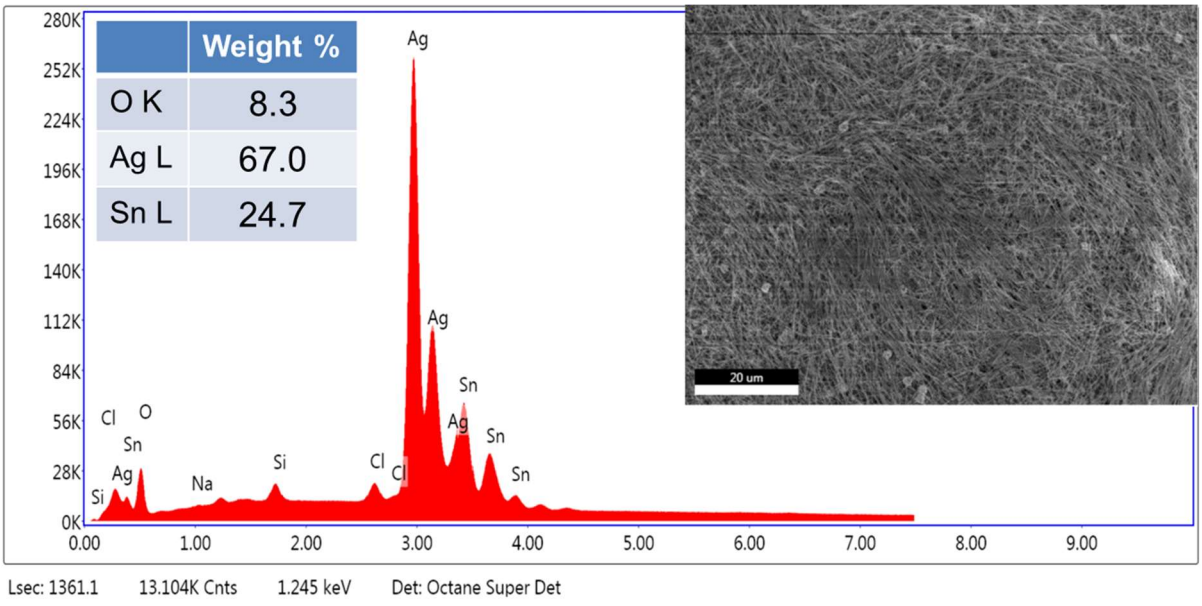

Figure S6. EDS spectrum of Ag/SnO_2NWs, inset: weight percentage of O, Ag and Sn in the hybrid, and STEM image of the sample area for EDS analysis.

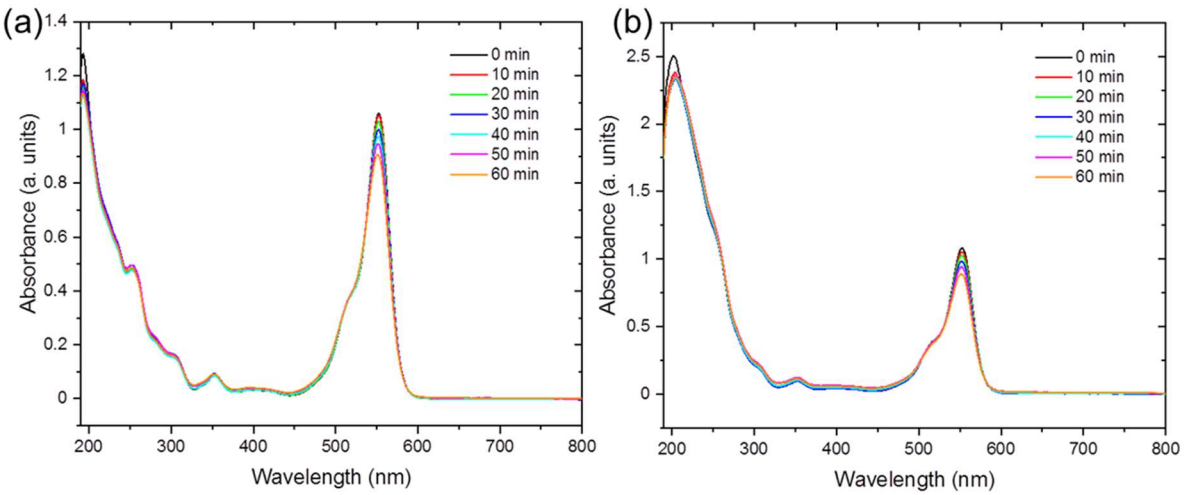

Figure S7. Absorbance spectra of rhodamine B and SnO_2NPs at a concentration of (a) 0.66 mg/ml and (b) 2 mg/ml under 395 nm light irradiation.

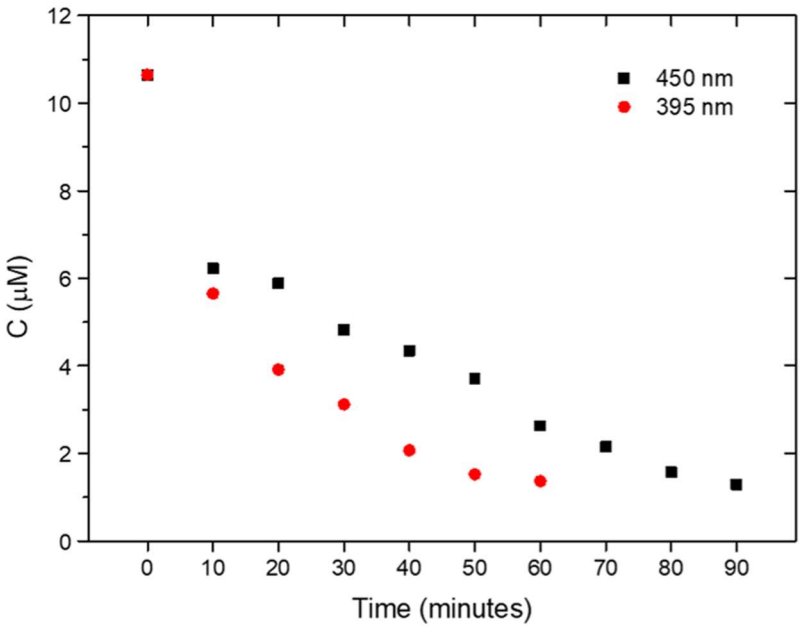

Figure S8. The degradation of rhodamine B with Ag/SnO2NWs photocatalysts presence under 395 nm (●) and 450 nm (■) irradiation.

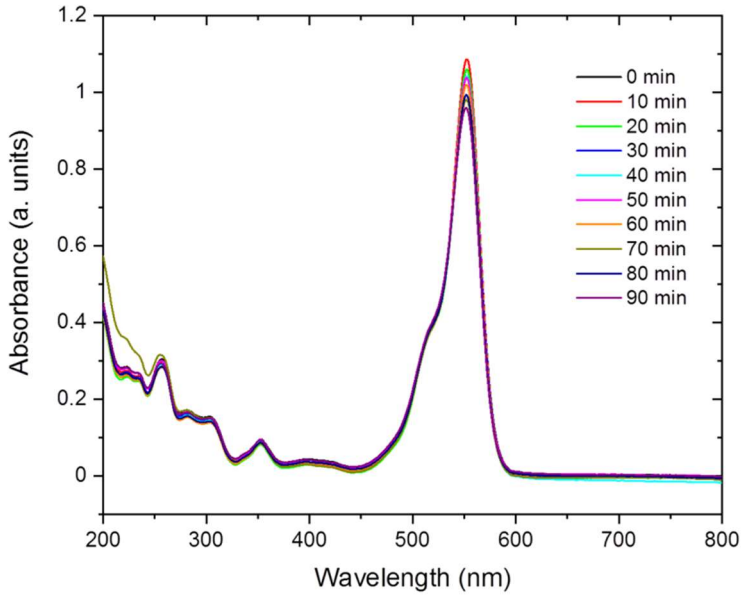

Figure S9. Absorbance spectra of rhodamine B irradiated under 450 nm.

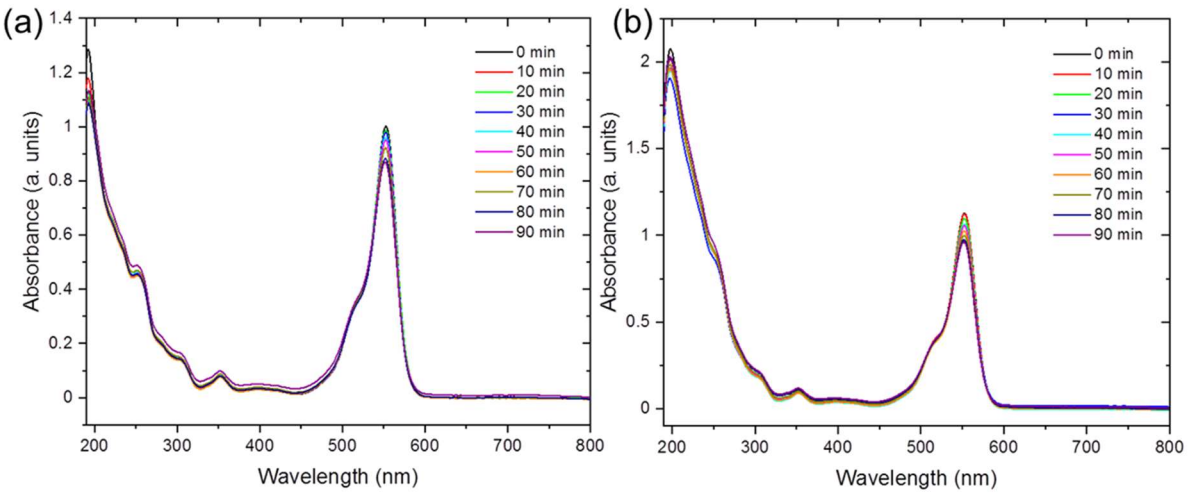

Figure S10. Absorbance spectra of rhodamine B with the presence of SnO_2NPs at a concentration of (a) 0.66 mg/ml and (b) 2 mg/ml under 450 nm light irradiation.

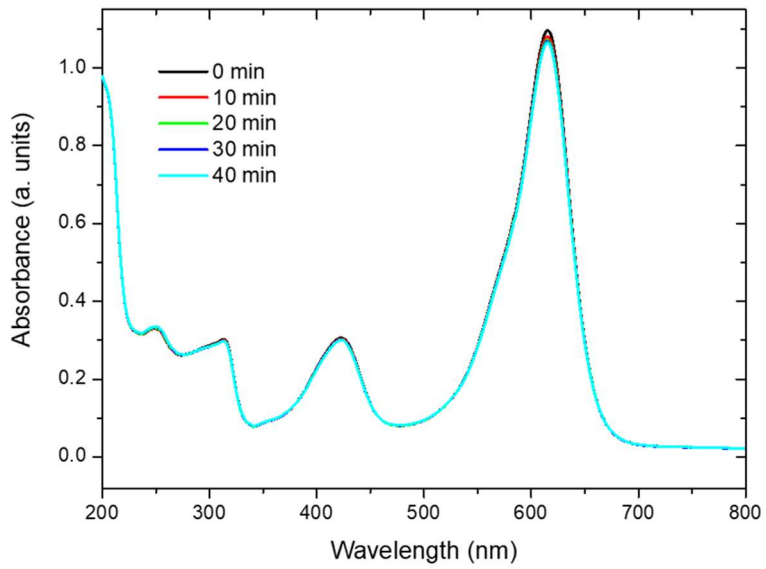

Figure S11. Absorbance spectra of malachite green without any irradiation with the presence of Ag/SnO_2NWs photocatalyst (dark experiment).

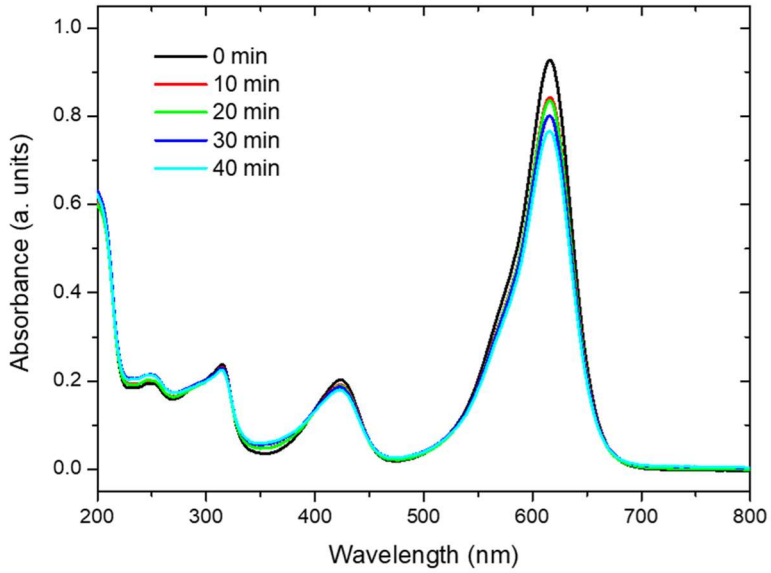

Figure S12. Absorbance spectra of malachite green irradiated under 450 nm without catalyst.

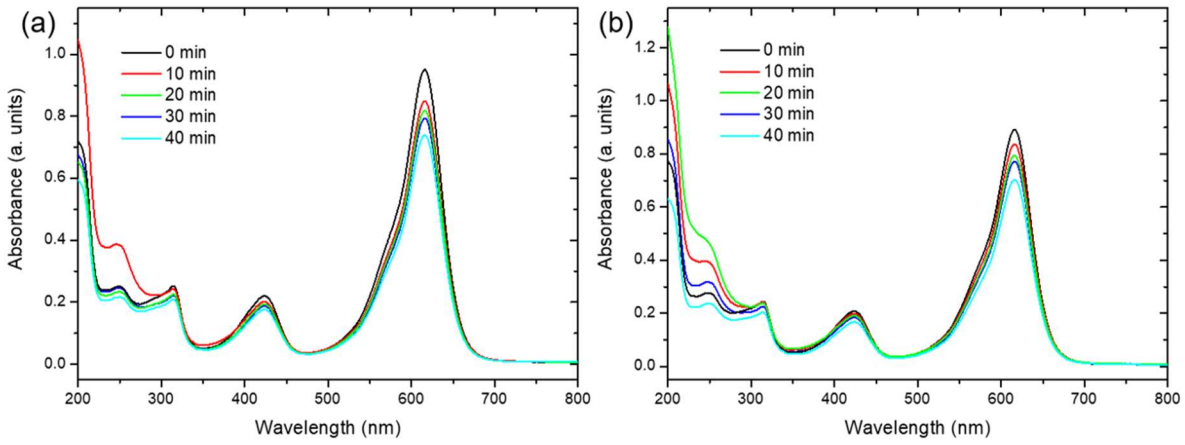

Figure S13. Absorbance spectra of malachite green with the presence of SnO_2NPs at a concentration of (**a**) 0.66 mg/ml and (**b**) 2 mg/ml under 450 nm light irradiation.

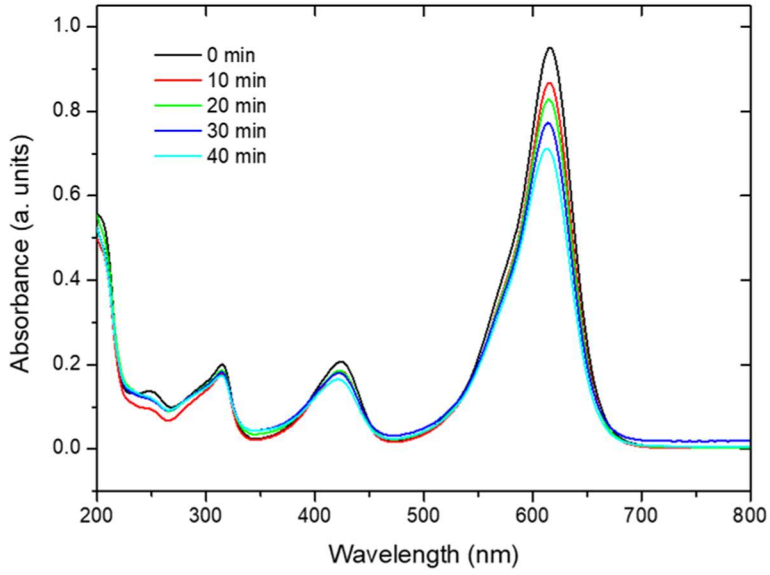

Figure S14. Absorbance spectra of malachite green with the presence of 2 mg/ml TiO_2 photocatalyst irradiated under 450 nm with.

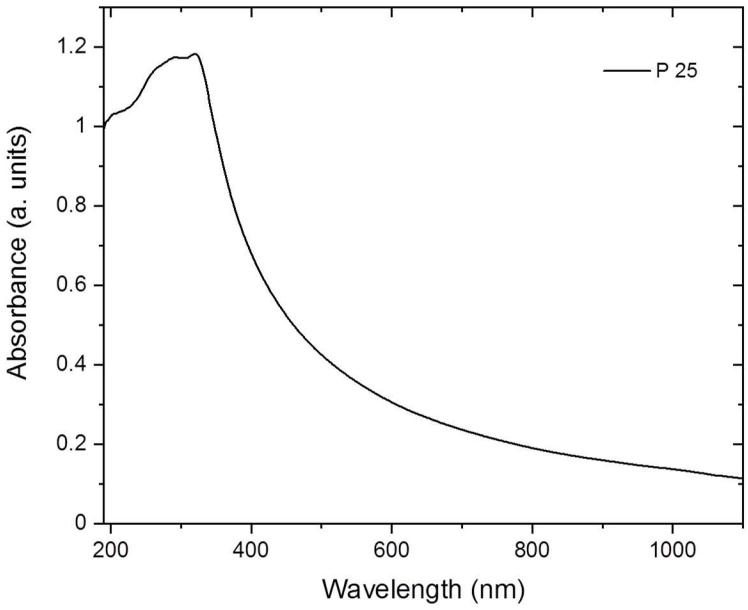

Figure S15. Absorbance spectra of TiO_2 (P25).