Supplementary materials

Highly Efficient Visible-Light-Driven Photocatalysis of Rose Bengal Dye and Hydrogen Production Using Ag@Cu/TiO_2 Ternary Nanocomposites

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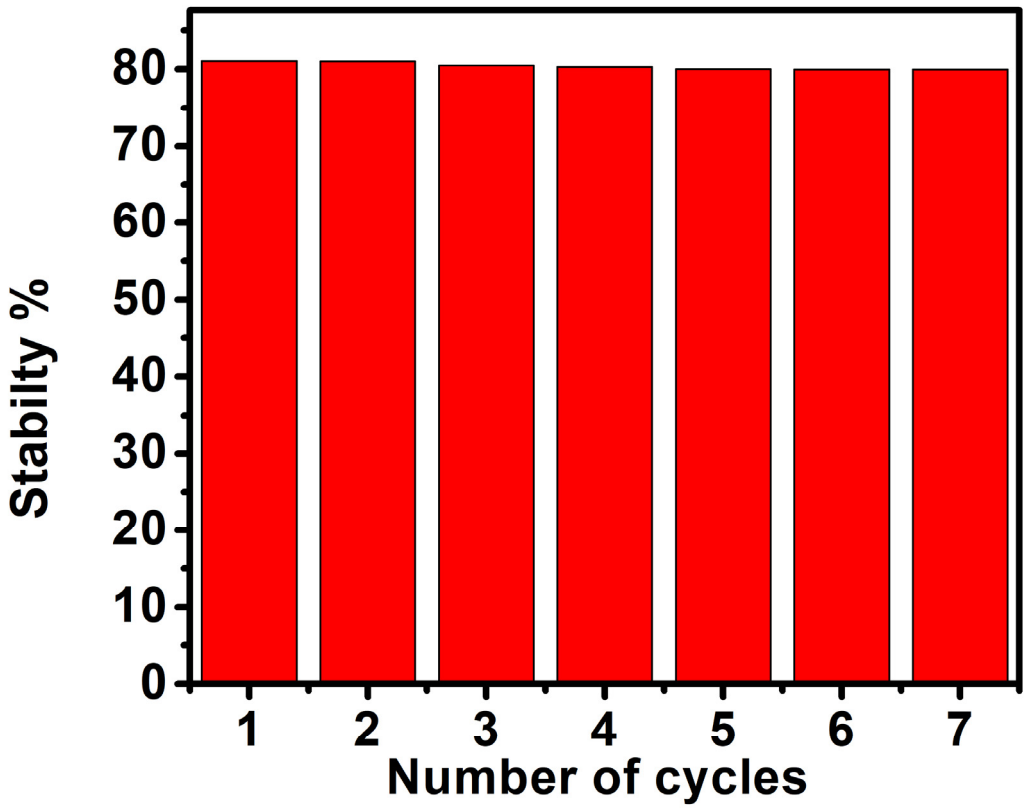

Figure S1: Reusability of Ag@Cu/TiO_2

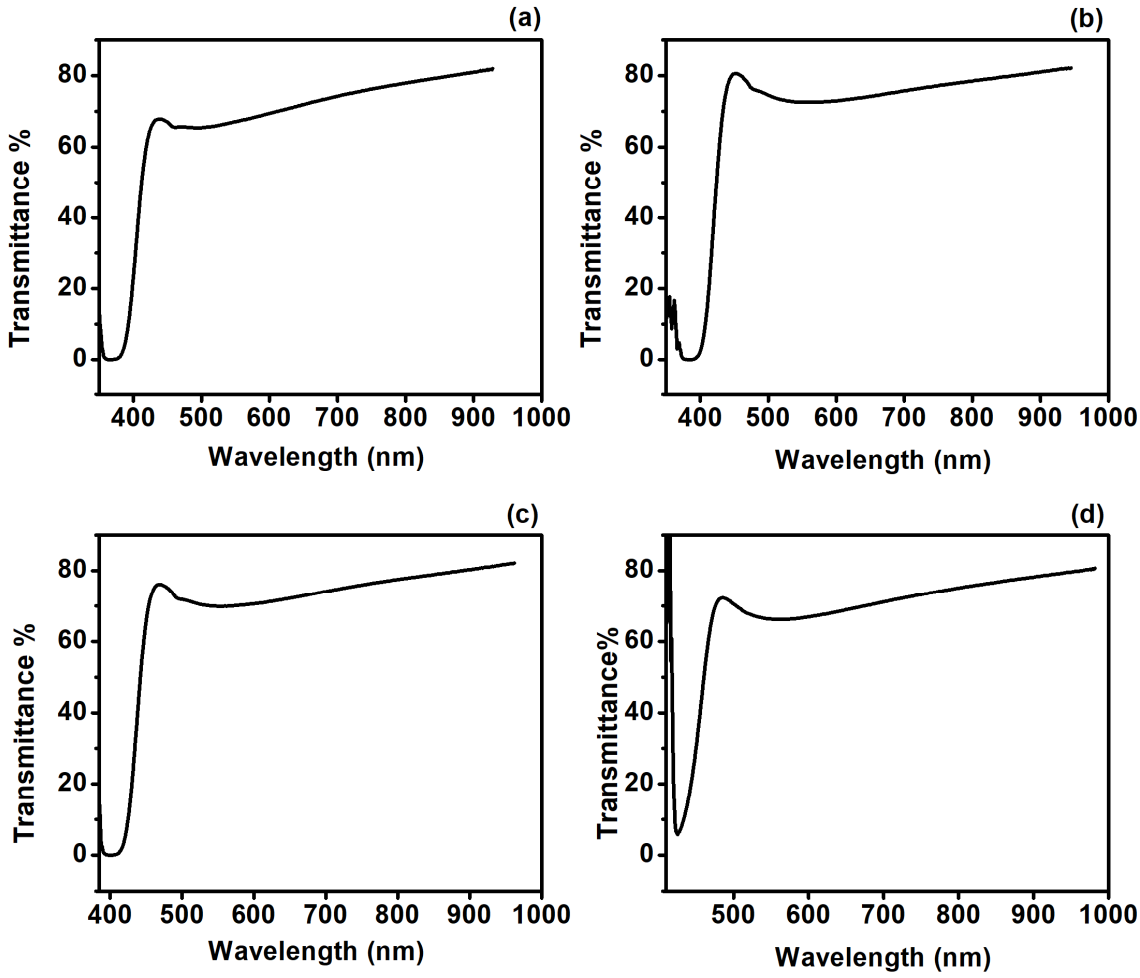

Figure S2: UV data for (a) TiO_2, (b) Ag/ TiO_2 (c) Cu/TiO_2 and (d) Ag@Cu/ TiO_2

X-Ray diffraction

The observance of peaks of TiO_2, Ag and Cu in respective composites suggests efficacy of the synthesis technique.

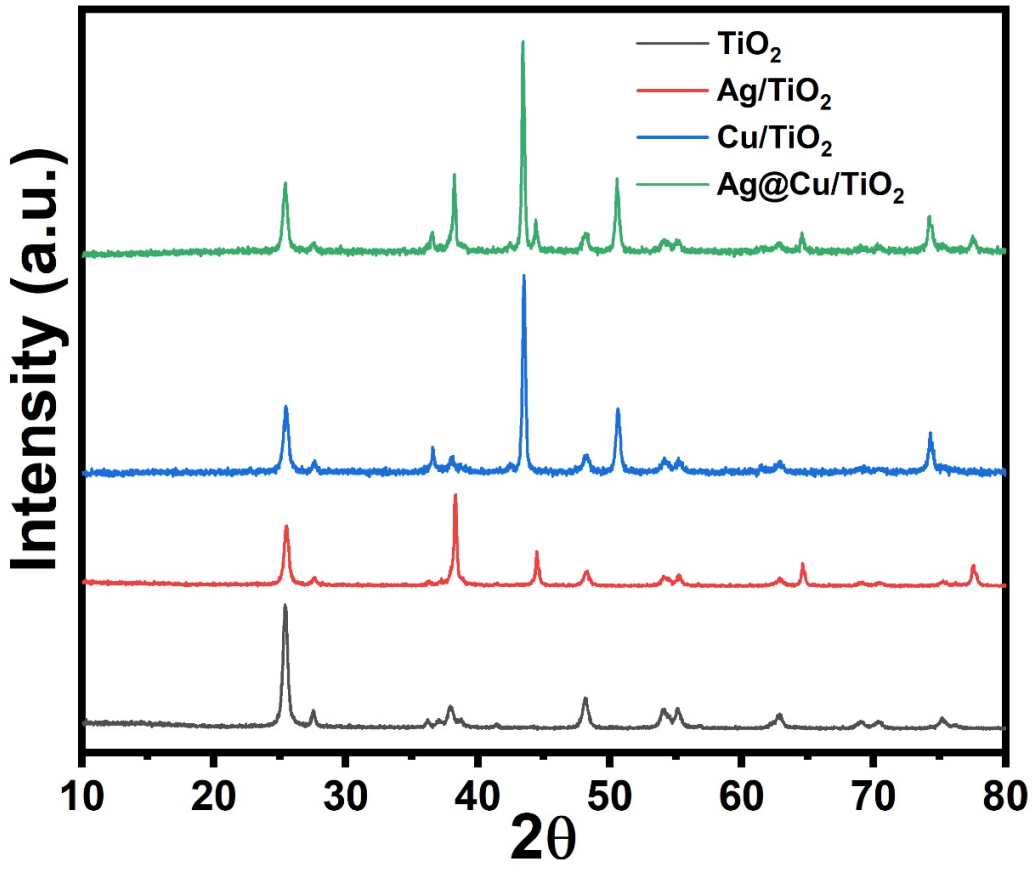

Figure S3: XRD pattern of TiO_2, Ag/ TiO_2, Cu/ TiO_2 and Ag@Cu/TiO_2.

Optimization of pH for the degradation of RB

Figure S4(a) shows the degradation of RB using pure TiO2 as the catalyst, while FigureS4 (b) presents the UV absorbance data for the degradation of RB using pure TiO2 under various pH levels, ranging from 7 to 9. The inset in Figure S4 (b) provides a zoomed-in view for clarity on the degradation percentage.