

Supporting information:

Solvothermal Synthesis and Photocatalytic Application of Porous Au/TiO₂ Nanocomposites

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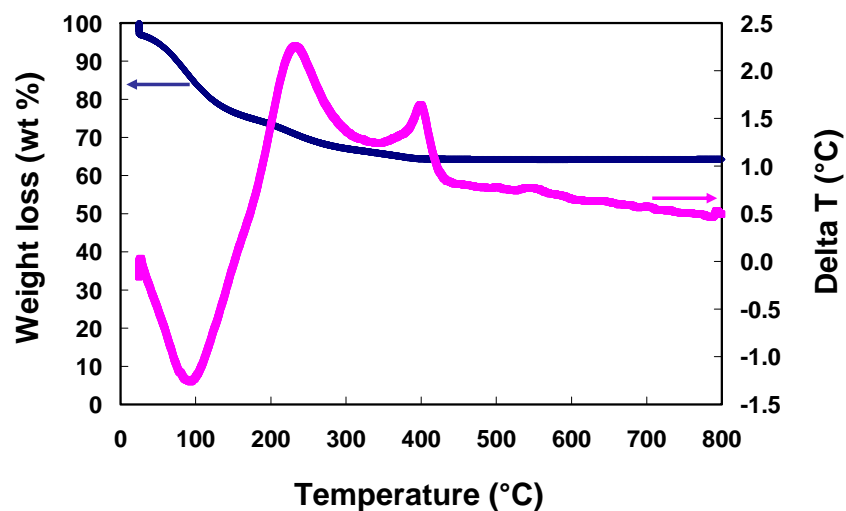


Figure S1. Typical TGA (left y axis) and SDTA (right y axis) curves of the porous agarose/TiO₂ hybrids.

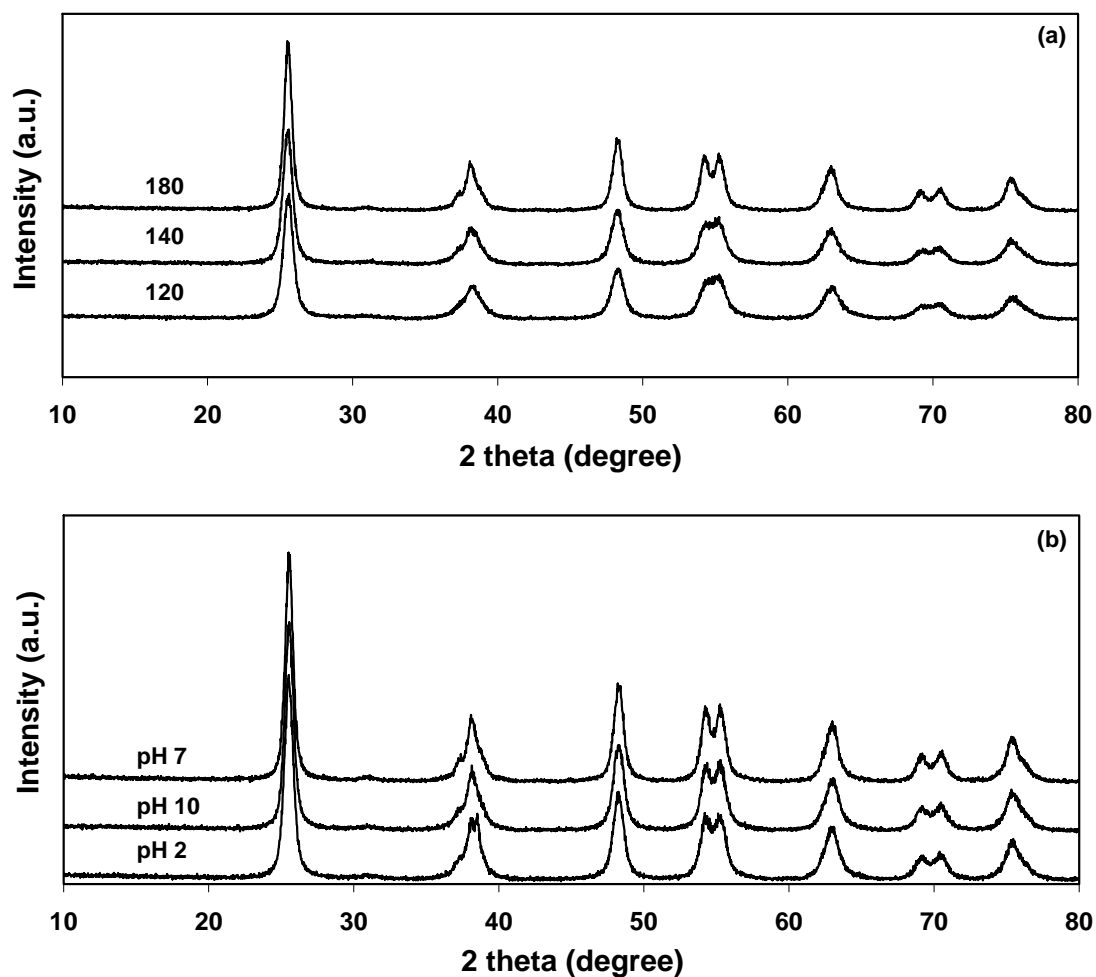


Figure S2. XRD patterns of Au/TiO₂ materials prepared at (a) pH 7 for 14 h at solvothermal temperatures of 120, 140 or 180 °C; and (b) 180 °C for 14 h after soaking in gold precursor solutions of pH 2, 7 or 10.

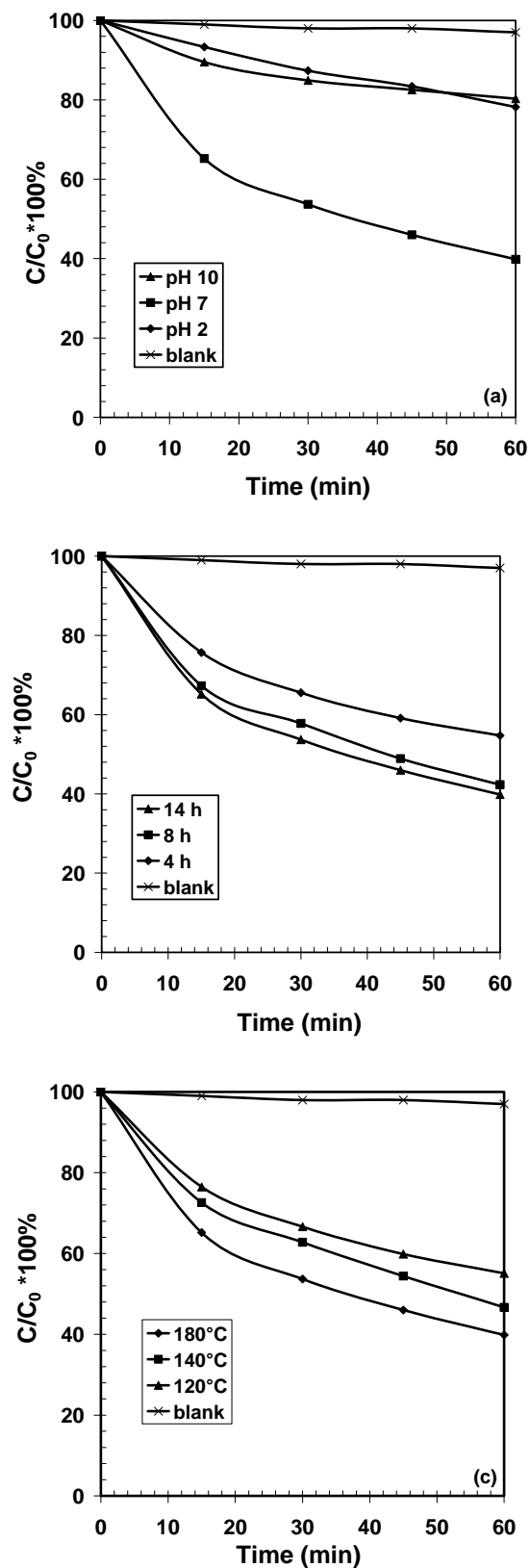


Figure S3. Effect of (a) gold precursor solution pH; solvothermal treatment (b) time, and (c) temperature on the photocatalytic activity of the Au/TiO₂ composites as a function of UV light irradiation time. Standard solvothermal treatment conditions: pH 7, 180 °C, 14 h, with variations as noted in each graph (gold concentration: 2.0 wt %). Blank indicates methylene blue degradation under UV light irradiation without a photocatalyst present.