

Supplementary Material

Porous Montmorillonite@Graphene Oxide@Au Nanoparticles Composite Microspheres for Organic Dye Degradation

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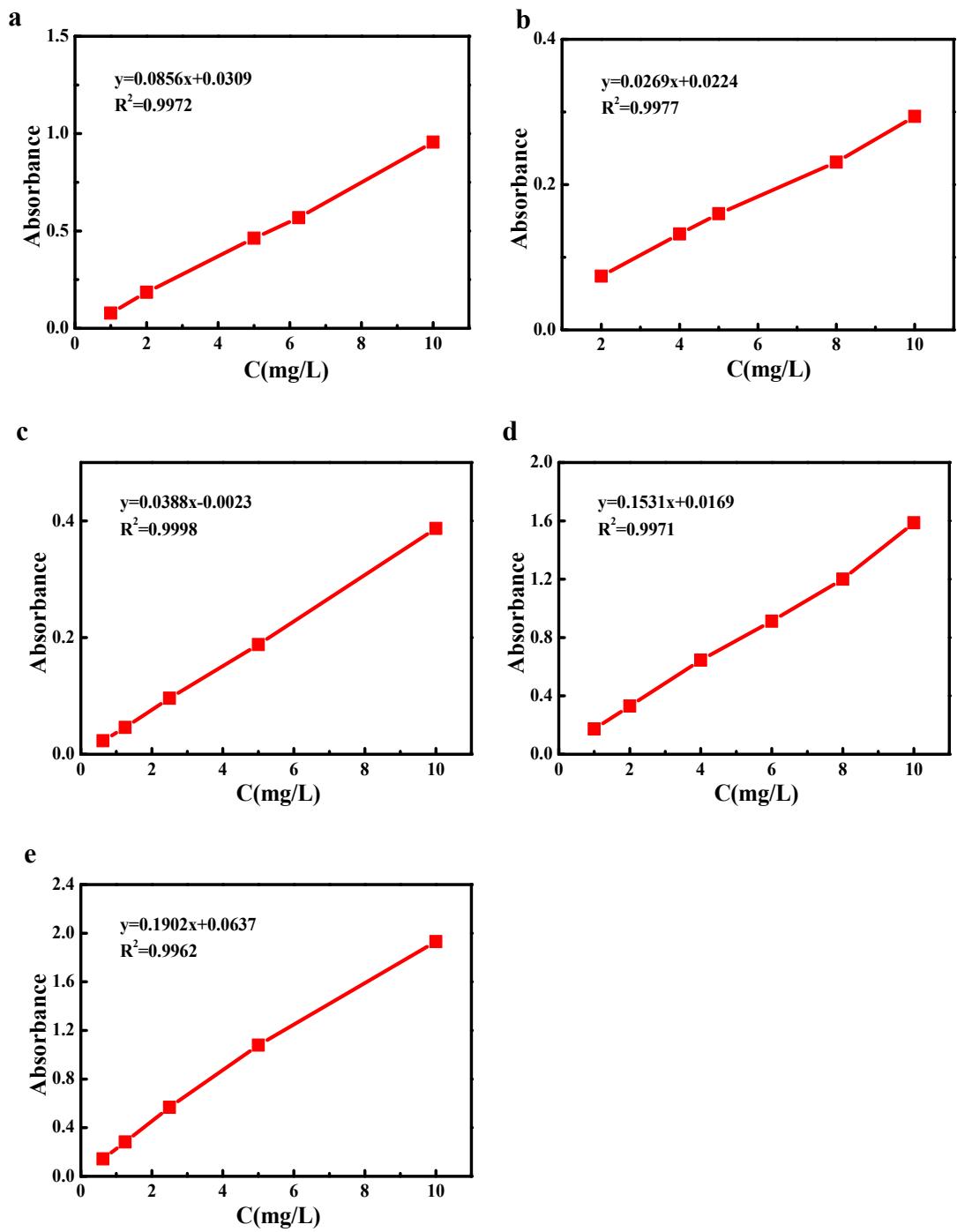


Figure S1. The concentration-absorbance calibration curves of (a) MB, (b) CR, (c) AF, (d) 4-NP, and (e) R6G.

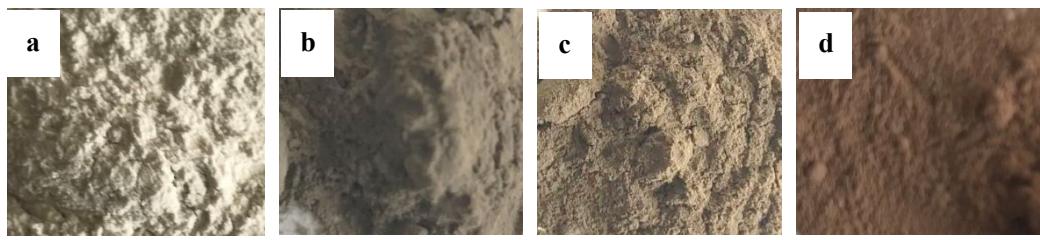


Figure S2. Photographs of SMt (a), SMt@PDA (b), SMt@GO (c), and SMt@GO@Au NPs (d).

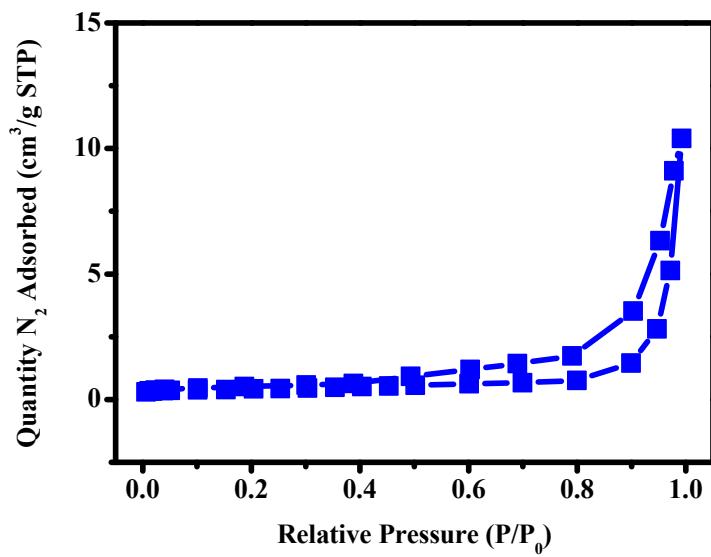


Figure S3. The nitrogen adsorption-desorption isotherm obtained at 77 K for Mt.

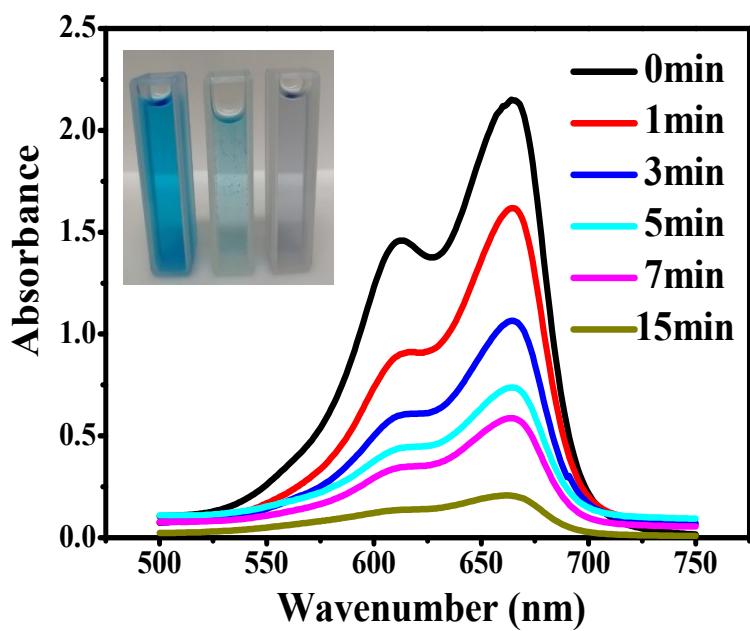


Figure S4. The time-resolved UV-Vis spectra of dyes or intermediate solutions; the initial concentrations of MB (25 mg L^{-1}) with NaBH_4 (0.05 M) and SMt @Au NPs (200 mg L^{-1}). Insets show a fading process of MB as the time passed.

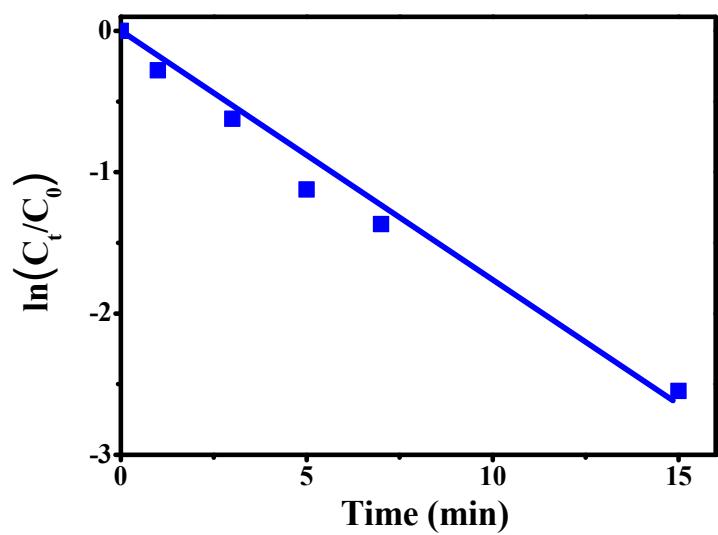


Figure S5. The plot of $\ln(C_t/C_0)$ versus reaction time of SMt @Au NPs for the catalytic reduction of MB. The initial concentrations of MB (25 mg L^{-1}) with NaBH_4 (0.05 M) and SMt @Au NPs (200 mg L^{-1}).

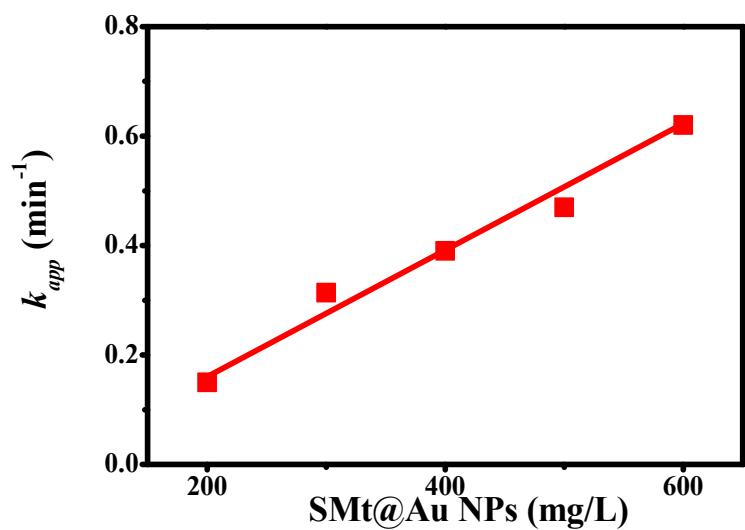


Figure S6. The effect of SMT@Au NPs concentration on k_{app} .

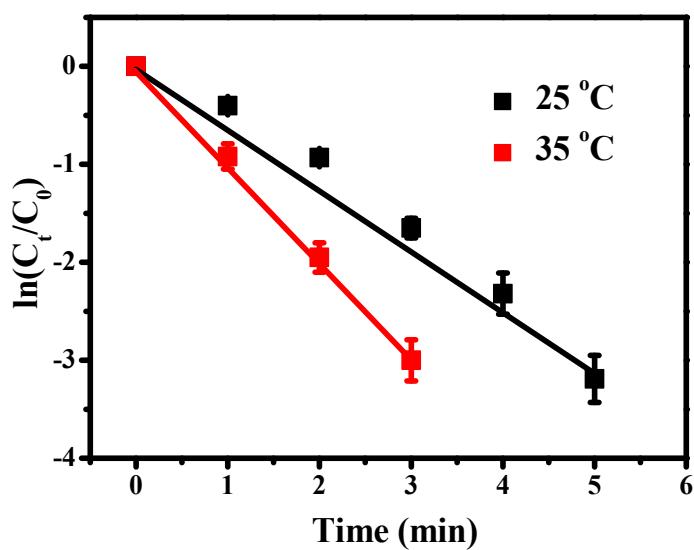


Figure S7. Plot of $\ln (C_t/C_0)$ versus time for the reduction of MB at different temperatures.

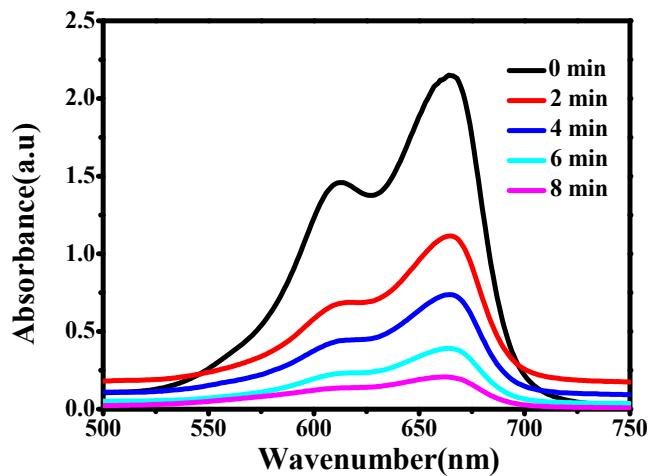


Figure S8. Catalytic performance of the SMT@GO@Au NPs composite microspheres. Time-resolved UV-Vis spectra of dyes or intermediate solutions; the initial concentrations of the reaction mixture were: dyes or intermediates (25 mg L^{-1}) with NaBH_4 (0.05 M) and SMT@GO@Au NPs (100 mg L^{-1}).