Supplementary Material (ESI) for Journal of Materials Chemistry

Supporting Information

for

Magnetic Fe_3O_4@C@Cu_2O Composites with Bean-like Core/Shell Nanostructures: Synthesis, Properties and Application in Recyclable Photocatalytic Degradation of Dye Pollutants

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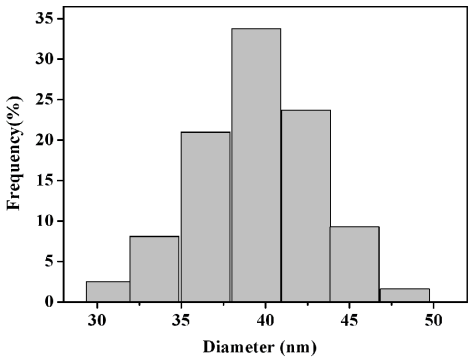

Figure S1. Histogram of size distribution of the as-prepared Fe_3O_4 nanoparticles.

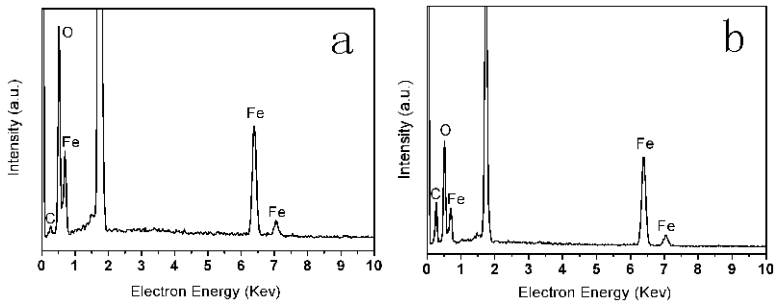

Figure S2. EDX spectra of the as-prepared Fe_3O_4 nanoparticles (a), and Fe_3O_4@C microspheres (b), respectively.

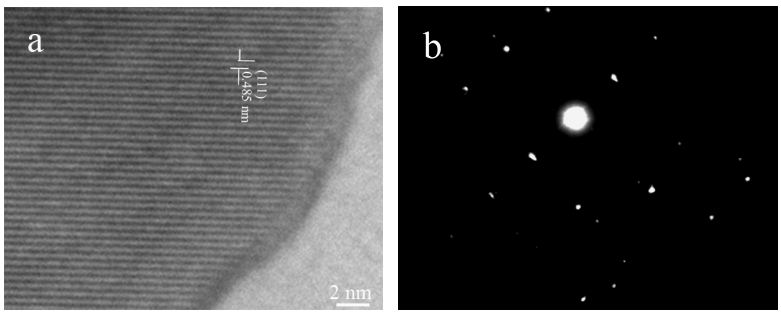

Figure S3. HRTEM image (a) and SAED pattern (b) of the as-prepared Fe_3O_4 nanoparticles.

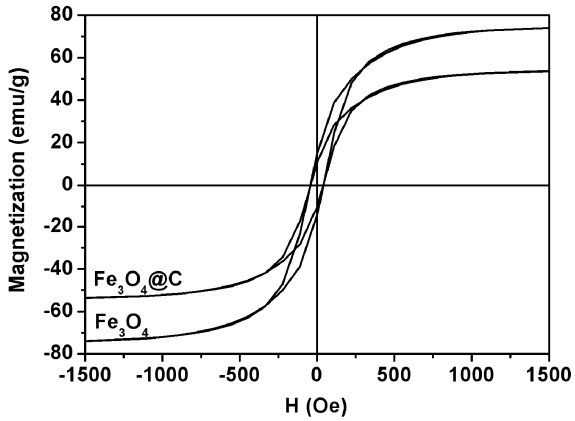

Figure S4. Hysteresis loops measured at 300 K for the as-prepared Fe_3O_4 nanoparticles and Fe_3O_4@C microspheres.

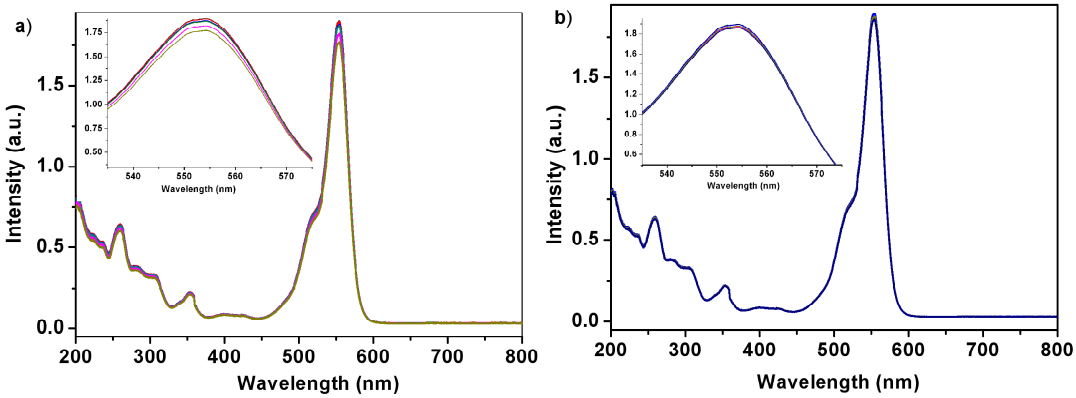

Figure S5. a) Time-dependent absorption of 50 mL 1.0×10^{-4} M RhB solution under visible-light irradiation in the absence of the as-prepared magnetic Fe_3O_4@C@Cu_2O core/shell composites; b) Similar solution with (a) was performed in dark in the presence of Fe_3O_4@C@Cu_2O composites (50 mg).

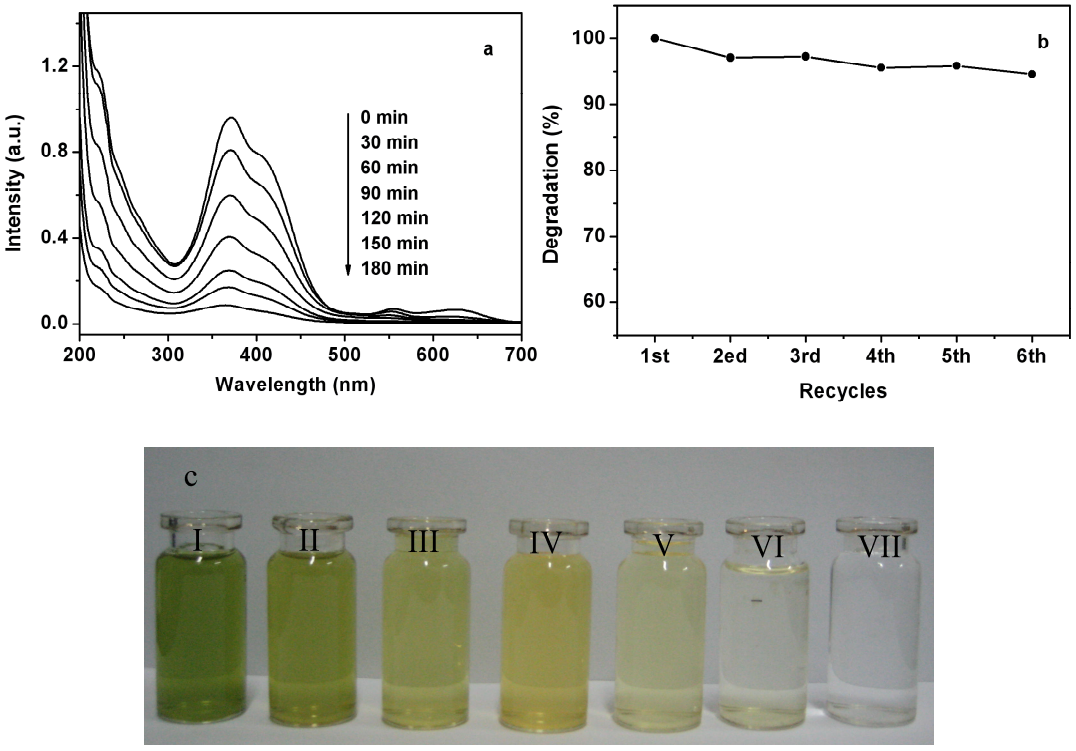

Figure S6. a) Time-dependent absorption of the practical polluted water under visible-light irradiation in the presence of the as-prepared magnetic Fe_3O_4@C@Cu_2O core/shell composites (50 mg); b) 6 cycles of the degradation of the practical polluted water on the magnetic Fe_3O_4@C@Cu_2O composites; c) Photographs of the corresponding degraded practical polluted water.