

Electronic Supplementary Information (ESI)

**Facile fabrication of magnetic mesoporous silica via
multifunctional surfactant self-assembly and oxidation**

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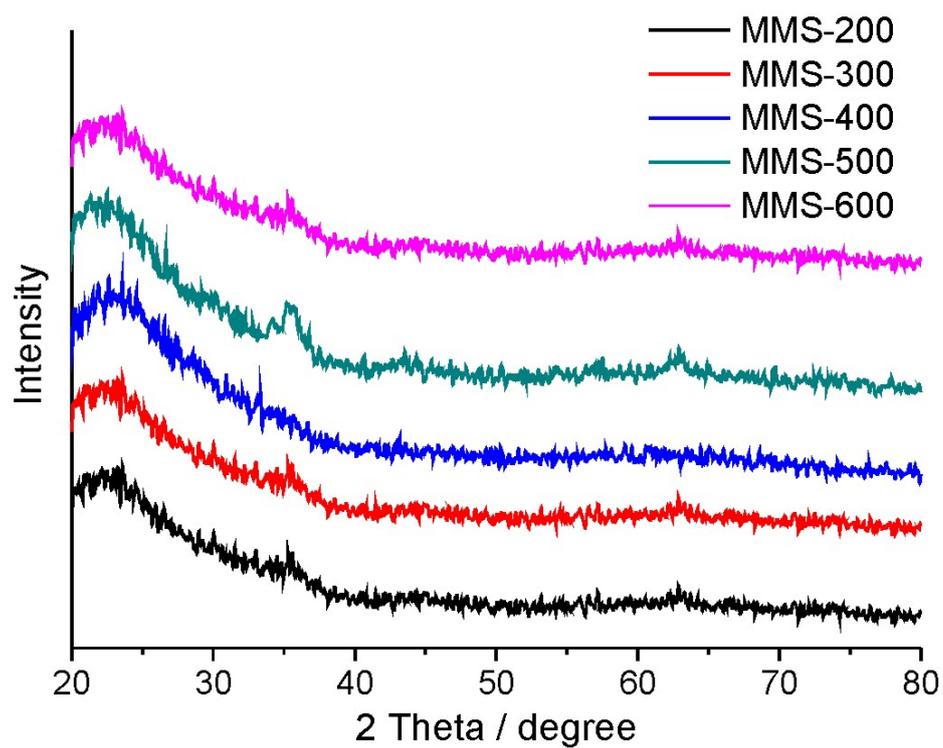


Fig. S1 Wide-angle XRD patterns of as-synthesized MMS which were obtained by oxygenation at different temperatures.

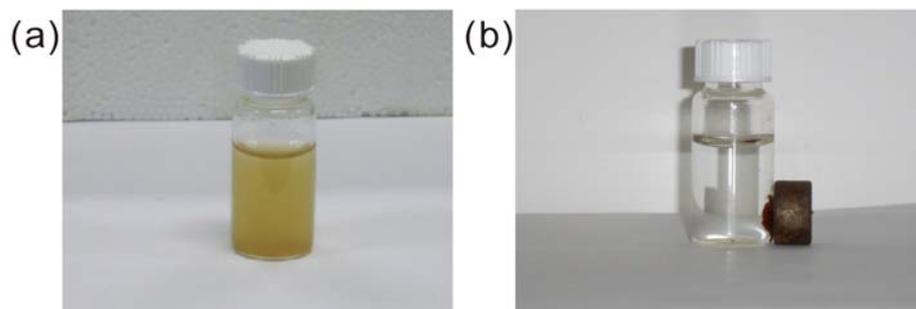


Fig. S2 The photographs of (a) as-synthesized MMS-300 in aqueous solution and (b) after magnetic capture within 1 min..

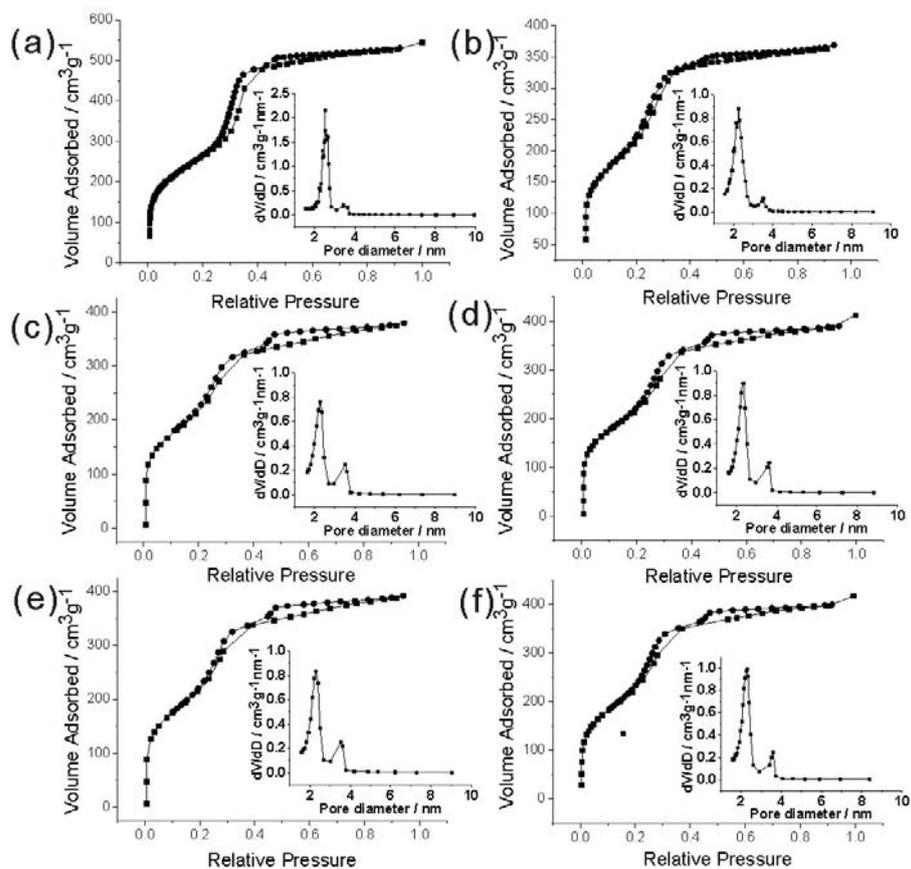


Fig. S3 Nitrogen adsorption-desorption isotherms (inset: pore size distribution) of (a) as-synthesized MS after extraction with ammonium nitrate, and (b)-(f) after oxidation at 200 °C, 300 °C, 400 °C, 500 °C, 600 °C.

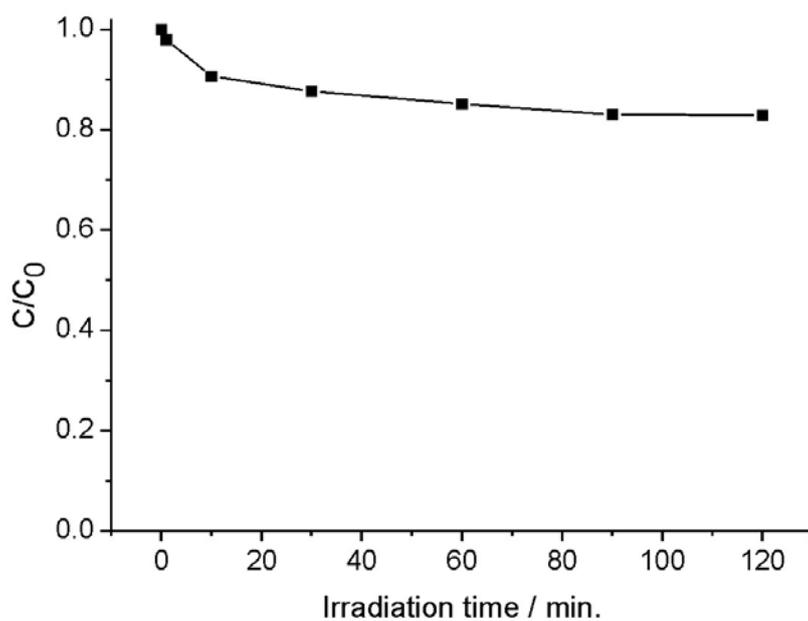


Fig. S4 Degradation profile of Methylene blue solution (initial concentration 50 ppm, 10 mL) by H_2O_2 (8 mM) in the absence of MMS under visible light irradiation (120 min.).

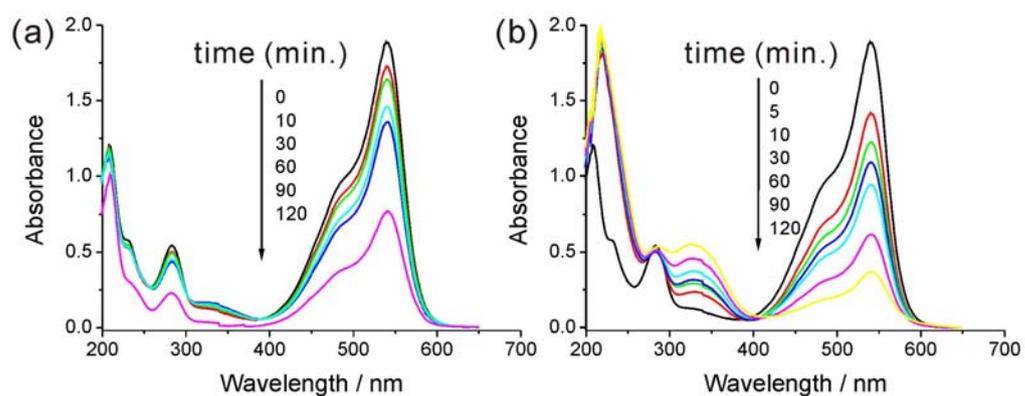


Fig. S5 UV-vis absorption spectra of the Basic Fuchsin solution in the presence of MMS-300 during (a) the adsorption process and (b) the photocatalytic degradation process in the presence of H_2O_2 under visible light irradiation.

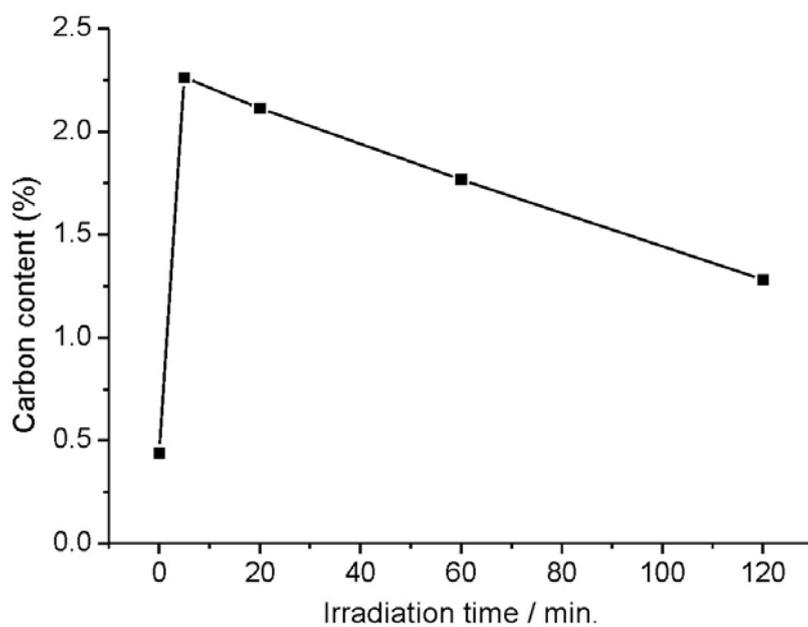


Fig. S6 The changes of carbon content in the MMS catalysts at different reaction time during the course of photocatalytic degradation of Rhodamine B.