

Synthesis of a high surface area V_2O_5/TiO_2-SiO_2 catalyst and its application in the visible light photocatalytic degradation of methylene blue

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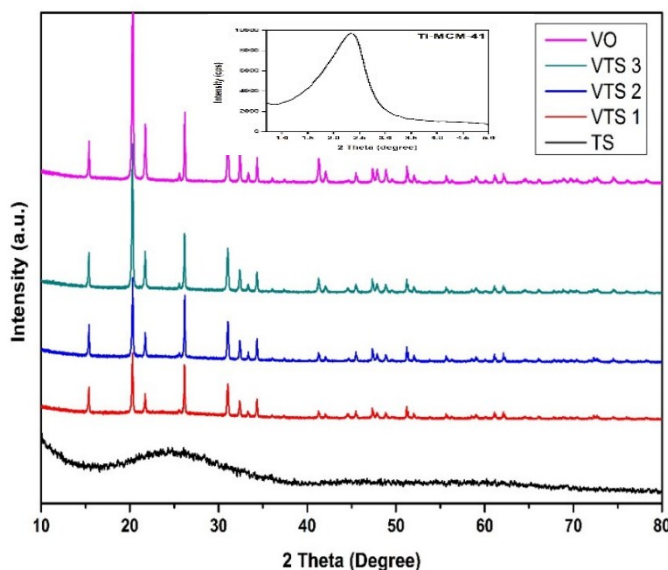


Fig. S1. Low angle (inset) and wide angle X-ray diffraction pattern of Ti-containing mesoporous materials and their V_2O_5 Catalyst.

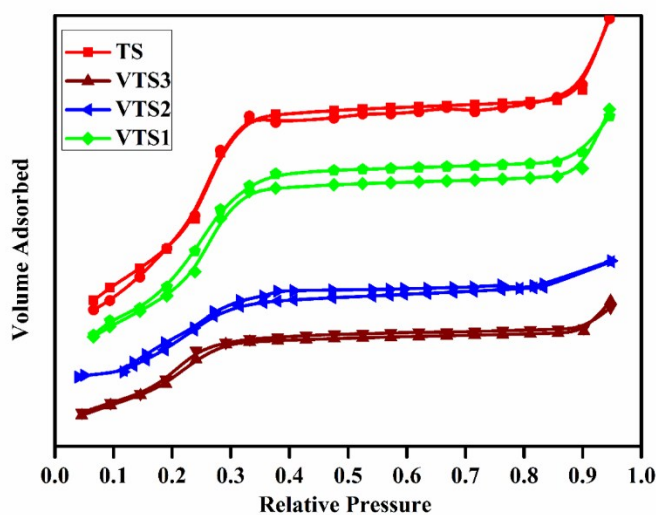


Fig. S2. N_2 -adsorption/desorption isotherm of TS, VTS1, VTS2 and VTS3 catalyst

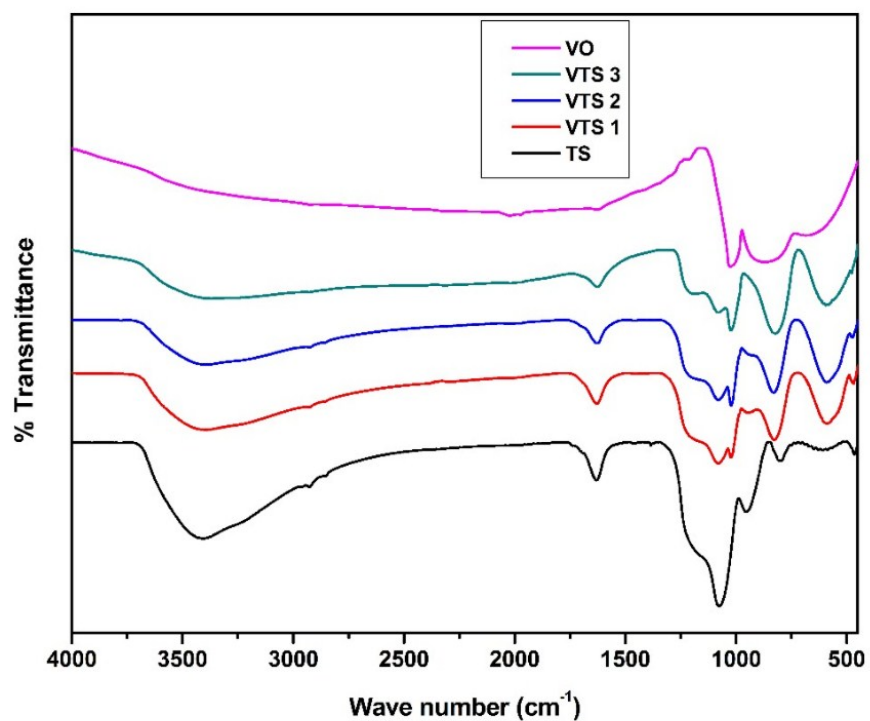


Fig. S3. FT-IR spectra of pure TS, pure VO, VTS1, VTS2 and VTS3 catalyst

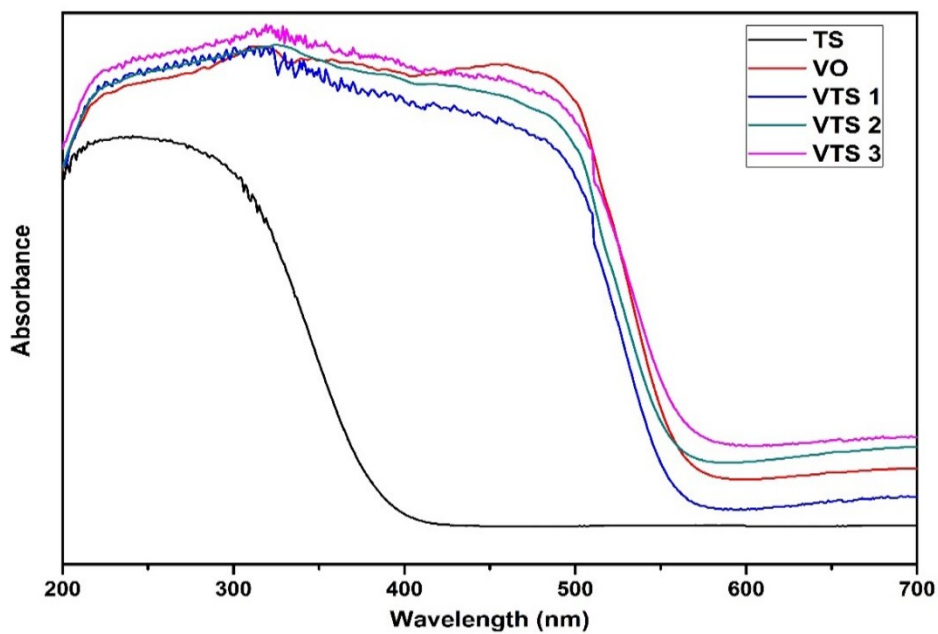


Fig. S4. UV-Visible DRS spectra of pure TS, pure VO, VTS1, VTS2 and VTS3 catalyst

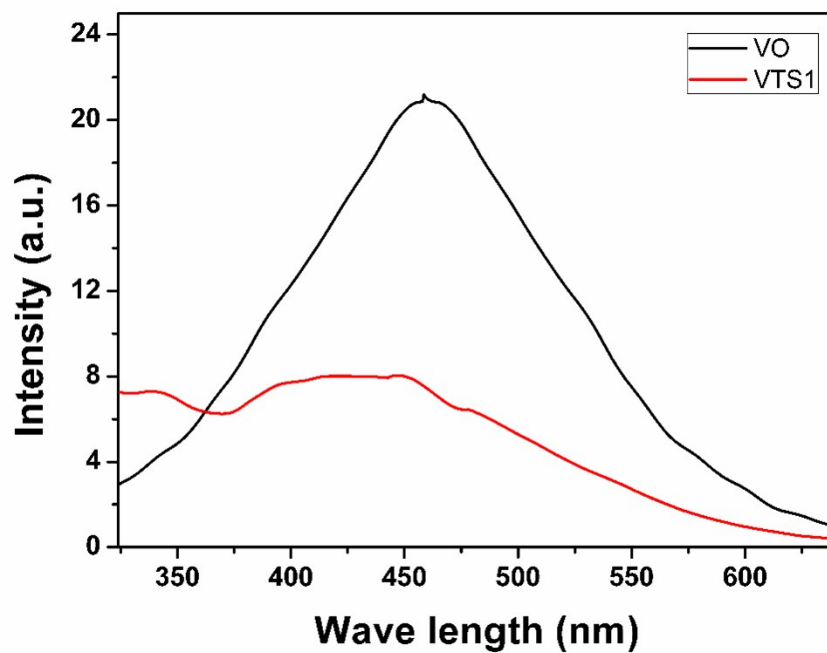
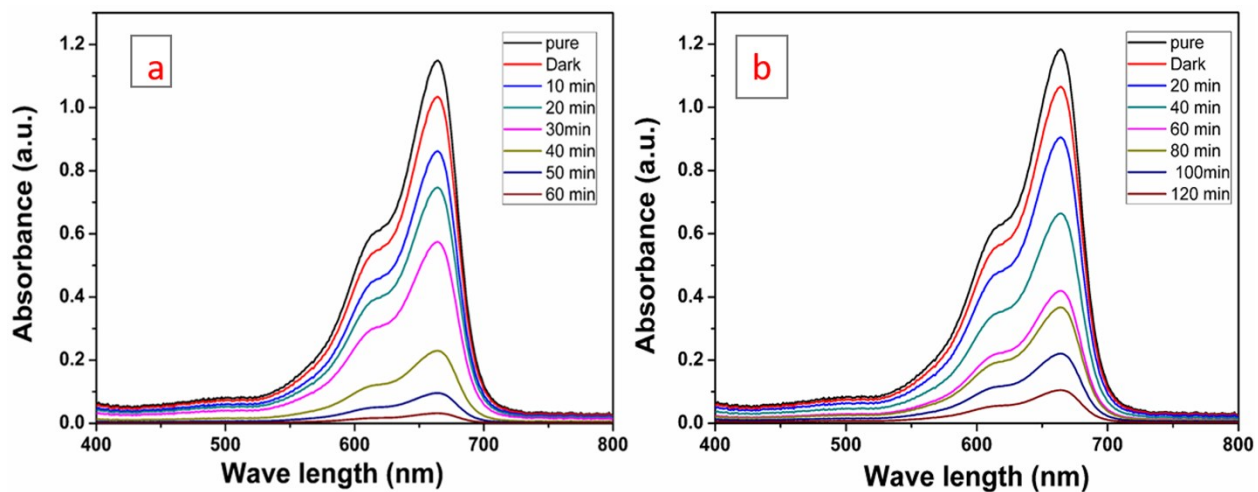


Fig. S5. Photoluminescence spectra of pure VO and VTS1 hybrid catalyst



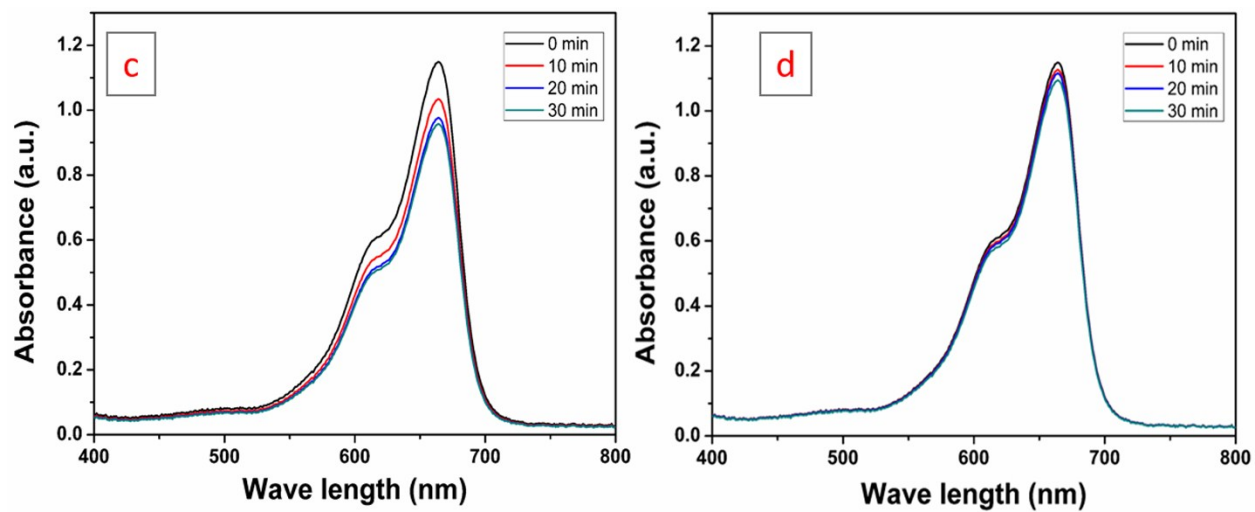


Fig. S6. Photocatalytic degradation of MB dye under the irradiation of (a) direct sunlight, (b) visible light, (c) catalyst adsorption for the VTS catalysts and (d) photolysis of MB