

## Degradation of Methylene Blue Dye in the Presence of Visible Light Using $\text{SiO}_2@ \alpha\text{-Fe}_2\text{O}_3$ Nanocomposites Deposited on $\text{SnS}_2$ Flowers

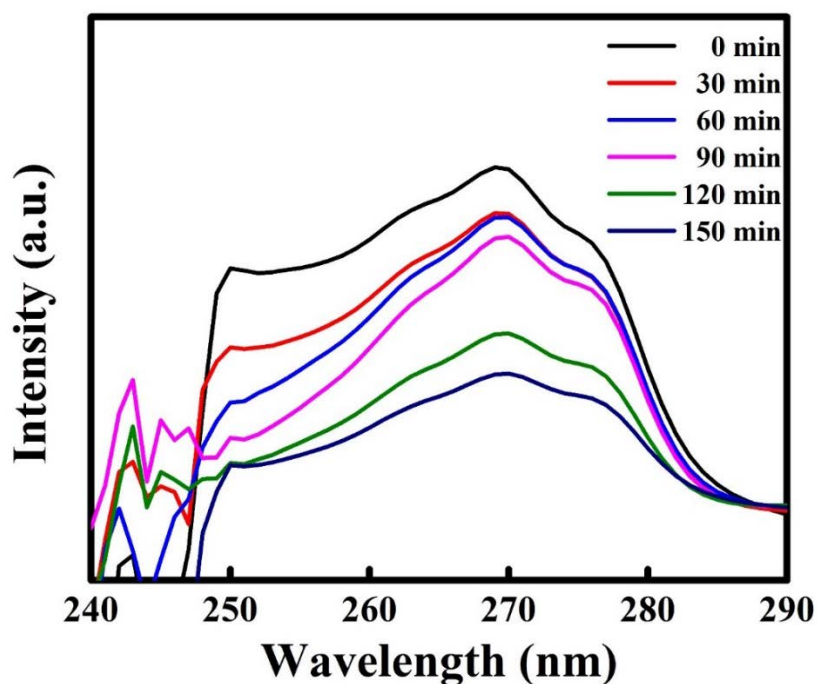
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**Figure S1.** UV-Vis absorbance spectra of phenol in the presence of  $\text{SnS}_2\text{-SiO}_2@ \alpha\text{-Fe}_2\text{O}_3$  (SSF-15 wt %) nanocomposite.

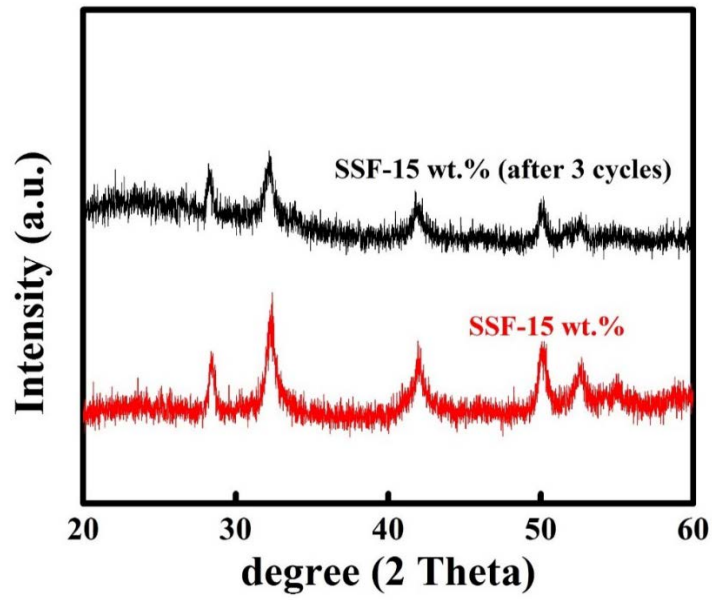


Figure S2. Comparison of XRD patterns of SSF-15 wt % with the same sample after three cycles

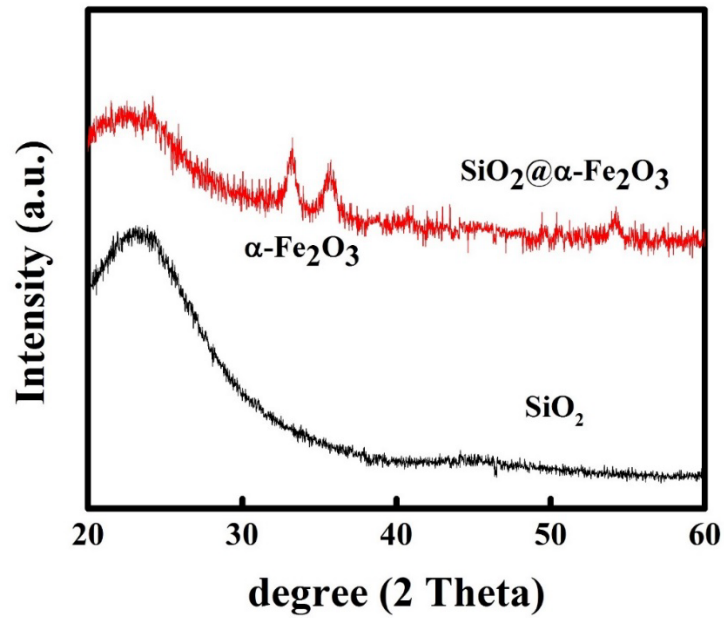


Figure S3. XRD patterns for SiO<sub>2</sub> and SiO<sub>2</sub>@ α-Fe<sub>2</sub>O<sub>3</sub>

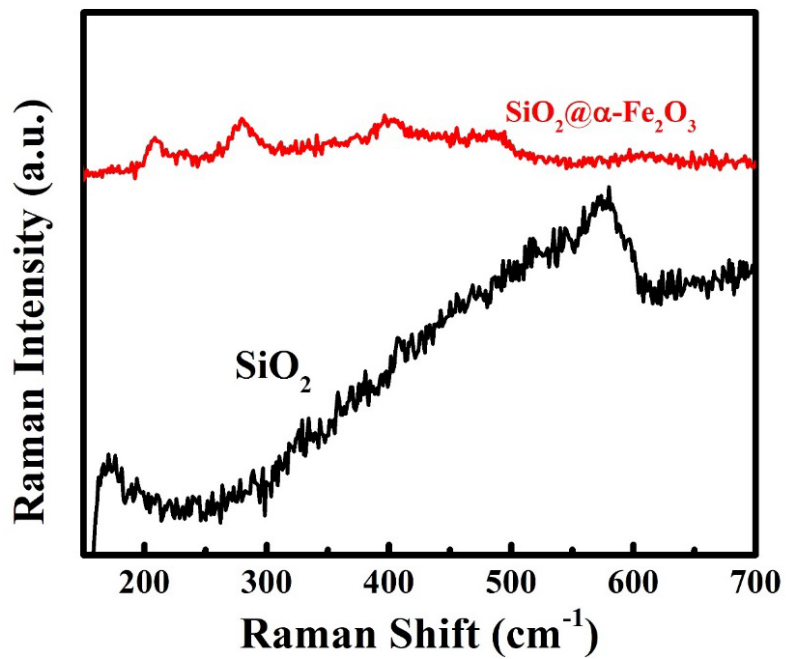


Figure S4. Raman spectra of SiO<sub>2</sub> and SiO<sub>2</sub>@ α-Fe<sub>2</sub>O<sub>3</sub>