Supporting information

Nanosorbcats of methylene blue on Novel Fe₂O₃ nanorods for photocatalytic water oxidation

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Fig.S1. (a) Water oxidation activity of MB@pfa@Fe₂O₃ (5 mg) in water (5 ml) at 298 K, and irradiated with red LED light (10 W). (b) water oxidation activity of pfa@Fe (5 mg) in the presence of $Ru^{II}(bpy)_{3}^{2+}$ (0.1 M, 200 µL) in water (5 ml) at 298 K, and irradiated with red LED light (10 W).



Fig.S2. Water oxidation activity of MB@pfa@Fe $_2O_3$ (10 mg) in water solution (5 ml) at 298 K.

a) irradiated with red LED light (10 W); b) irradiated with blue LED light (10 W).



Fig. S3 Water oxidation of MB@pfa@Fe₂O₃ in three consecutive runs. (a: first run; b: second run;

c: third run).