

Supporting information for:

A facile soft template method to synthesize hollow
carbon and MnO_x composite particles for effective
methylene blue degradation

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Table S1 Comparison of the catalytic performance for degradation of MB by different manganese oxide based catalysts under similar reaction conditions.

Ref.	Catalyst	Reaction Condition	H ₂ O ₂ added per 100ml MB (mL)	Mn loading (g/L)	Degradation efficiency (%)
1.	Mn ₃ O ₄	MB (100 mg/L, 20 mL), 75 °C, 90 min	75	0.7203	99.7
2.	Mn ₃ O ₄	MB (100 mg/L, 20 mL), 80 °C, 180 min	75	0.7203	99.7
3.	Mn ₃ O ₄ nanorods	MB (100 mg/L, 50 mL), 80 °C, 60 min	40	0.1441	95
4.	MnO	MB (100 mg/L, 50 mL), 80 °C, 60 min	40	0.1549	91.6
	Mn ₂ O ₃			0.1392	76.0
	Mn ₃ O ₄			0.1441	99.3
	MnO ₂			0.1264	66.8
5.	Mn ₃ O ₄ -MnO ₂ nanorods	MB (10 mg/L, 100 mL), 80 °C, 60 min	20	0.0678	99.5
6.	MnO _x and carbon composite	MB (100mg/L, 50 mL), catalyst (10 mg), 80 °C, 60 min	20	0.0230	96.0
This study	SC-Mn-0.3	MB (100mg/L, 50 mL), 80 °C, 50 min	6	0.0114	21.5
	HC-Mn-0.5			0.0180	88.3
	HC-Mn-0.7			0.0242	94.5

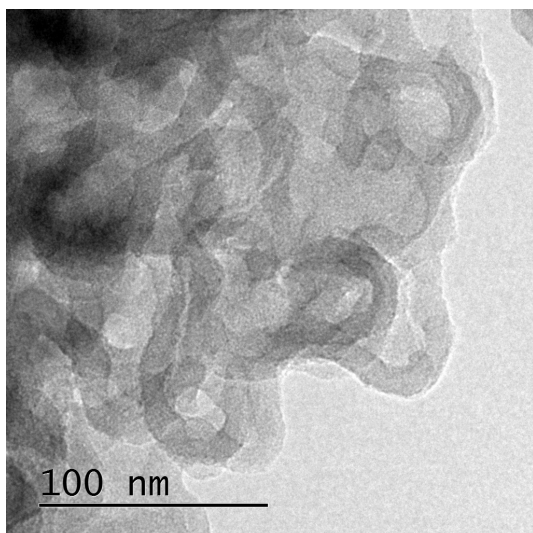


Fig. S1 TEM image of the HC-Mn-0.7 after the cycling tests.

References

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