

Supporting Information

Sisal-like Sn²⁺ doped ZnO hierarchical structures: synthesis, growth mechanism, and their application in photocatalysis

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Table S1. The Brunauer–Emmett–Teller (BET) surface area and pore volumes.

Sample	BET surf areas	Pore volumes
	[m ² g ⁻¹]	[cm ³ g ⁻¹]
ZnO	0.50793	0.0036486
ZS2	0.81348	0.012059
ZS4	1.3467	0.010339
ZS6	2.3275	0.022461
ZS8	1.5473	0.012352
ZS10	1.472	0.010761

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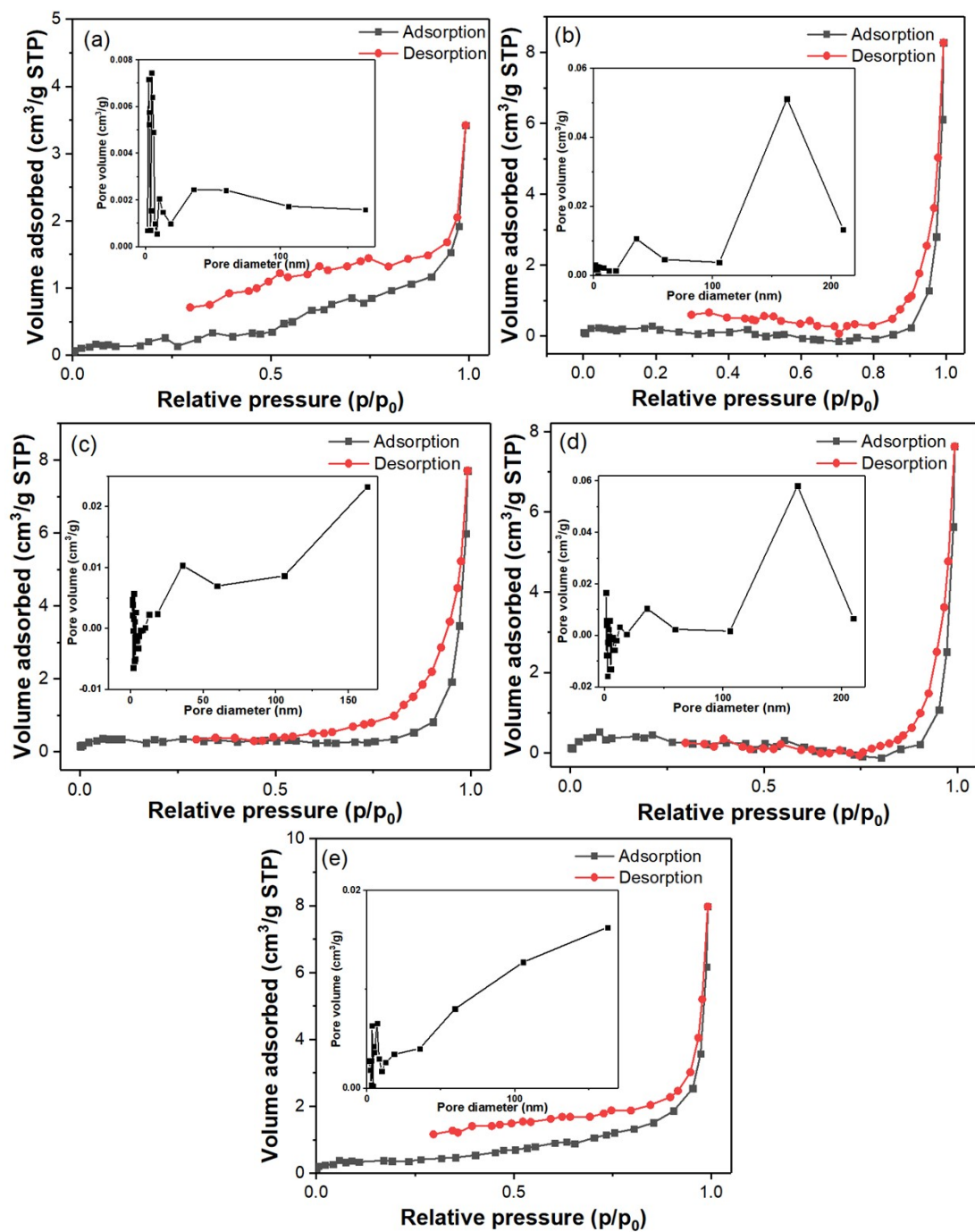


Fig. S1. Typical N₂ gas adsorption-desorption isotherm of the ZnO products at 90°C (a) ZnO, (b) ZS2, (c) ZS4, (d) ZS8, (e) ZS10. Inset: the corresponding pore-size distribution.

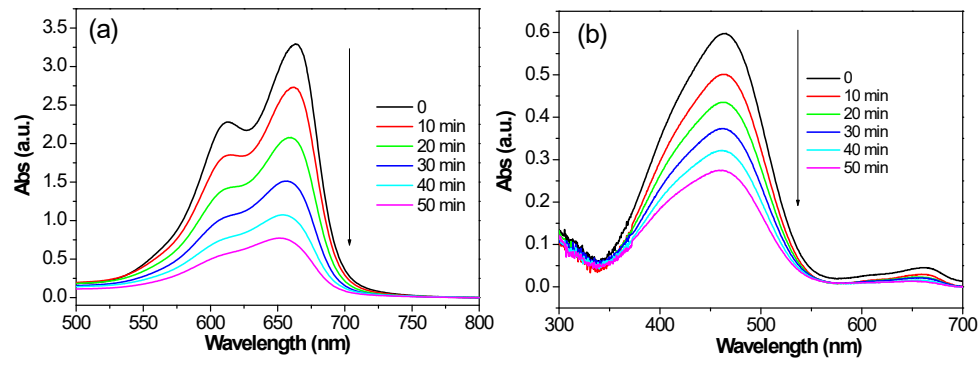


Fig.
S2.
The

absorption spectra of MB (a) and MO (b) solution in the presence of the ZS6 samples at various durations.

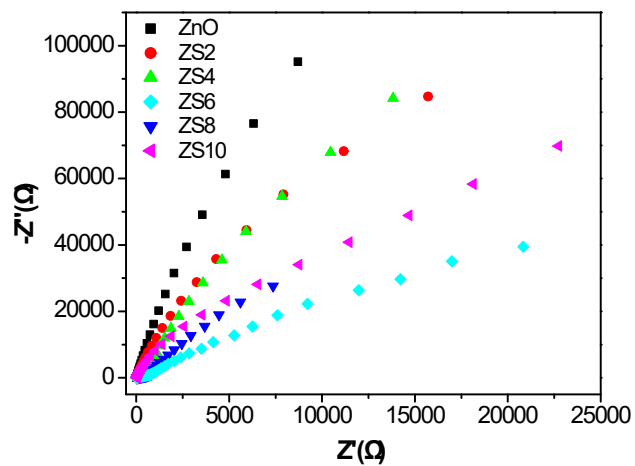


Fig. S3. EIS Nyquist plots of the as-synthesized pure ZnO and Sn doped ZnO samples.

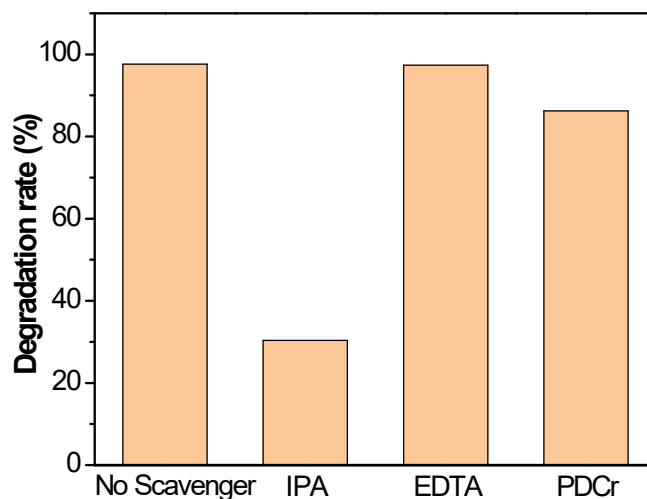


Fig. S4. trapping of active species during photocatalytic degradation experiment of RhB over the ZS6 samples under light irradiation after 50 min