Supporting Information

Comparative study of the photocatalytic performance for the degradation of different dyes by $ZnIn_2S_4$: Adsorption, active species, and pathways

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Table A.1 Parameters of standard spectra and simulated spectra obtained by EPR.

	BMPO/·OH(Conf1)		BMPO/·OH(Conf2)		BMPO/$\cdot O_2^-$(Conf1)		BMPO/$\cdot O_2^-$(Conf2)	
	Standard	Simulated	Standard	Simulated	Standard	Simulated	Standard	Simulated
	13.47	14.19	13.56	13.97	13.40	13.49	13.37	13.21
α_H^β	15.31	16.35	12.30	12.99	12.10	9.97	9.42	9.86
α_H^γ	0.62	0.58	0.66	1.03				

Fig. A.1 Nitrogen adsorption-desorption isotherms of $ZnIn_2S_4$ and the pore size distribution plot of $ZnIn_2S_4$ (inset).

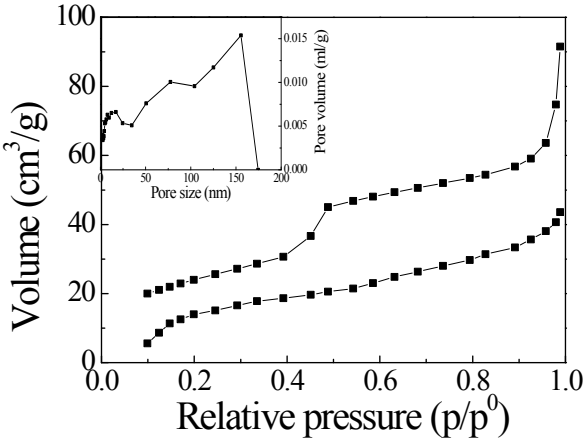


Fig. A.2 Photocatalytic degradation of MO by $ZnIn_2S_4$ under visible light irradiation in the presence of scavengers (EDTA, benzoquinone, and isopropyl alcohol were used to capture holes, $\cdot O_2^-$, and $\cdot OH$, respectively).

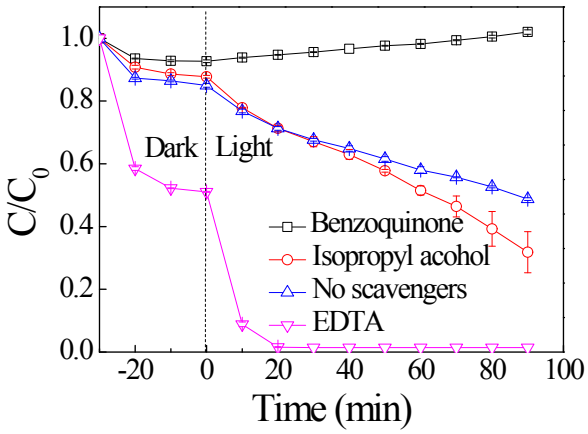


Fig. A.3 UV-Vis diffuse reflectance spectra of $ZnIn_2S_4$.

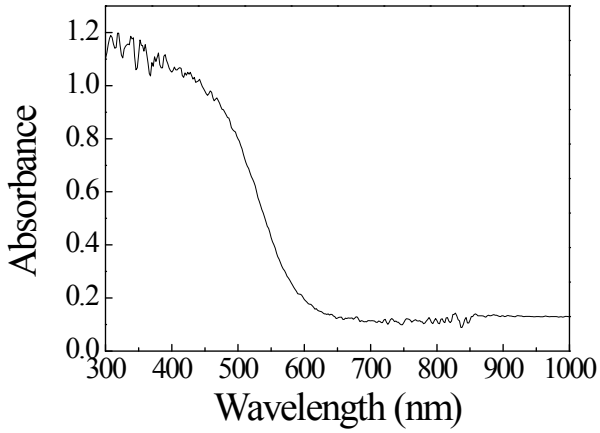


Fig. A.4 XPS spectra of $ZnIn_2S_4$.

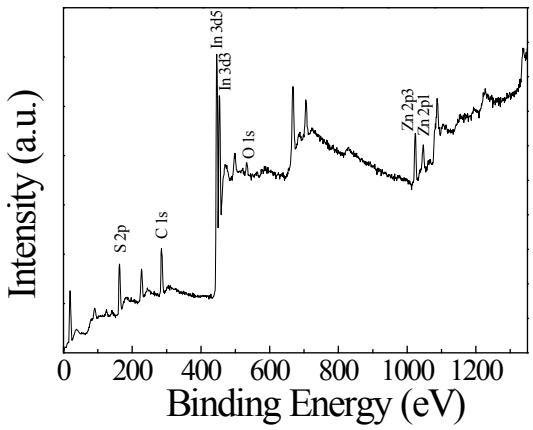


Fig. A.5 HPLC chromatograms of RhB degraded samples under visible irradiation at (a) 0 min and (b) 60 min.

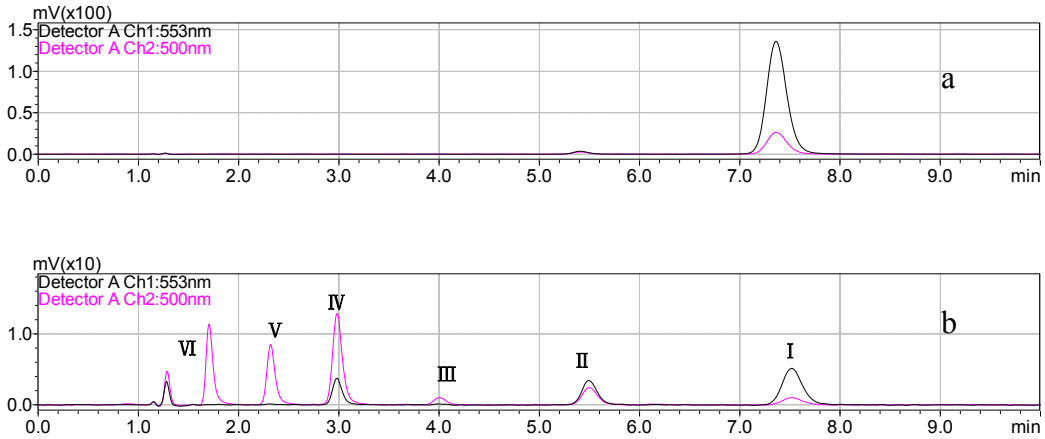


Fig. A.6 UV-Vis spectra of degraded MO solution with an initial MO concentration of 5 mg/L and a $ZnIn_2S_4$ dosage of 0.3 g/L.

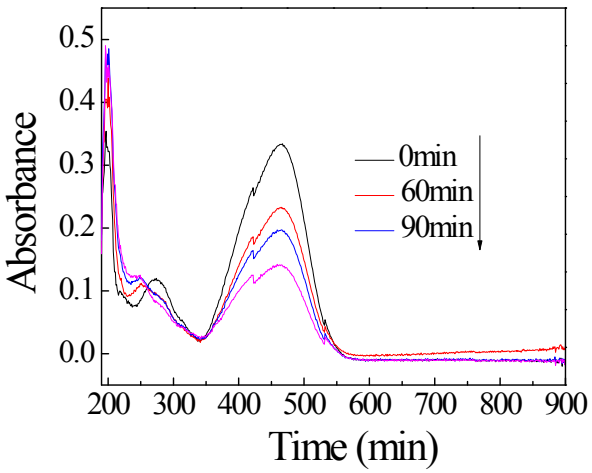
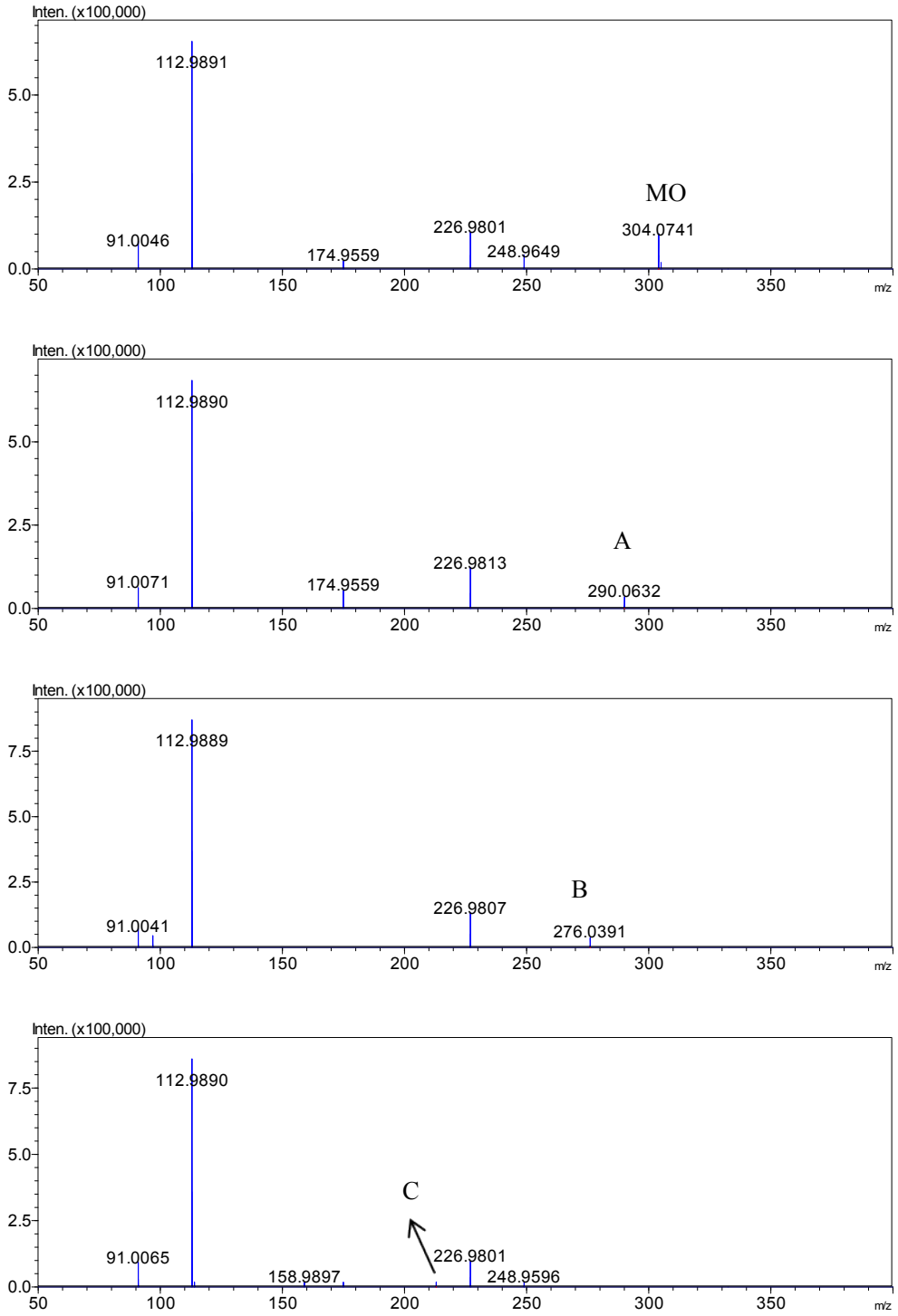
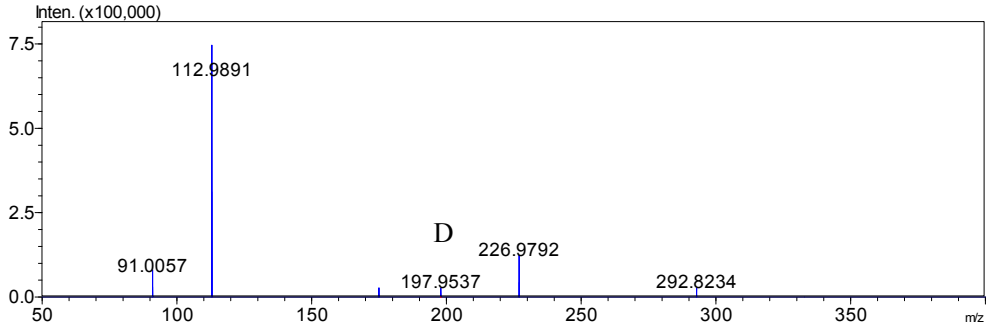


Fig. A.7 Mass spectrograms of proposed intermediates generated during photocatalytic degradation of MO by $ZnIn_2S_4$ under visible light irradiation.

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50
100
150
200
250
300
350
m/z