

Supplementary Materials

Fig. S1 Synthetic route of CCS/Bent-DETA

Fig. S2 Photoluminescence spectra of (a) chitosan, CCS-DETA and CCS/Bent-DETA;(b) CCS/Bent-DETA with varying bentonite dosage; (c) Transient PL spectra and (d) electrochemical impedance spectroscopy of chitosan, CCS-DETA, and CCS/Bent-DETA composite

Fig. S3 Photocatalytic cycle performance of CCS/Bent-DETA for MO

Table. S1 Thermodynamic parameters of MO adsorbed by CCS/Bent-DETA

Table. S2 Kinetic fitting parameters of CCS-DETA and CCS/Bent-DETA for MO photocatalysis

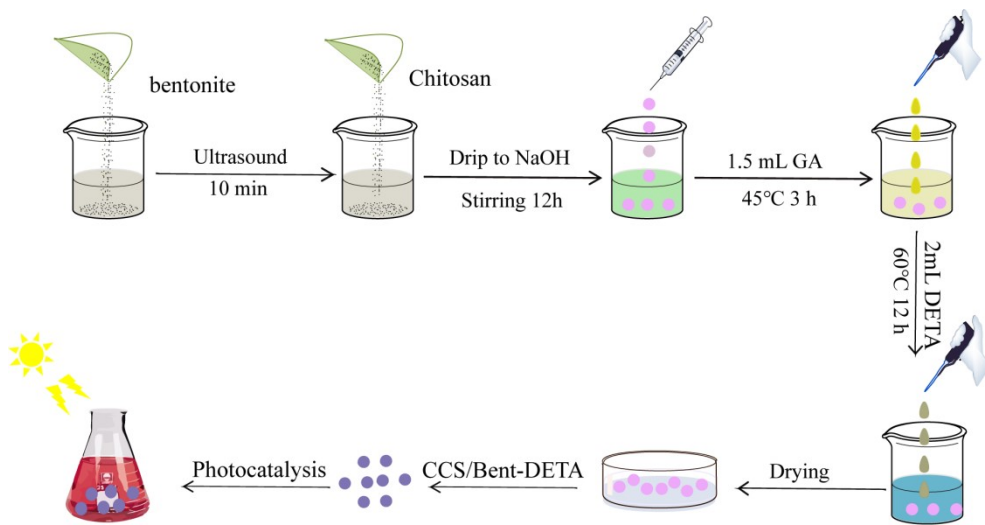


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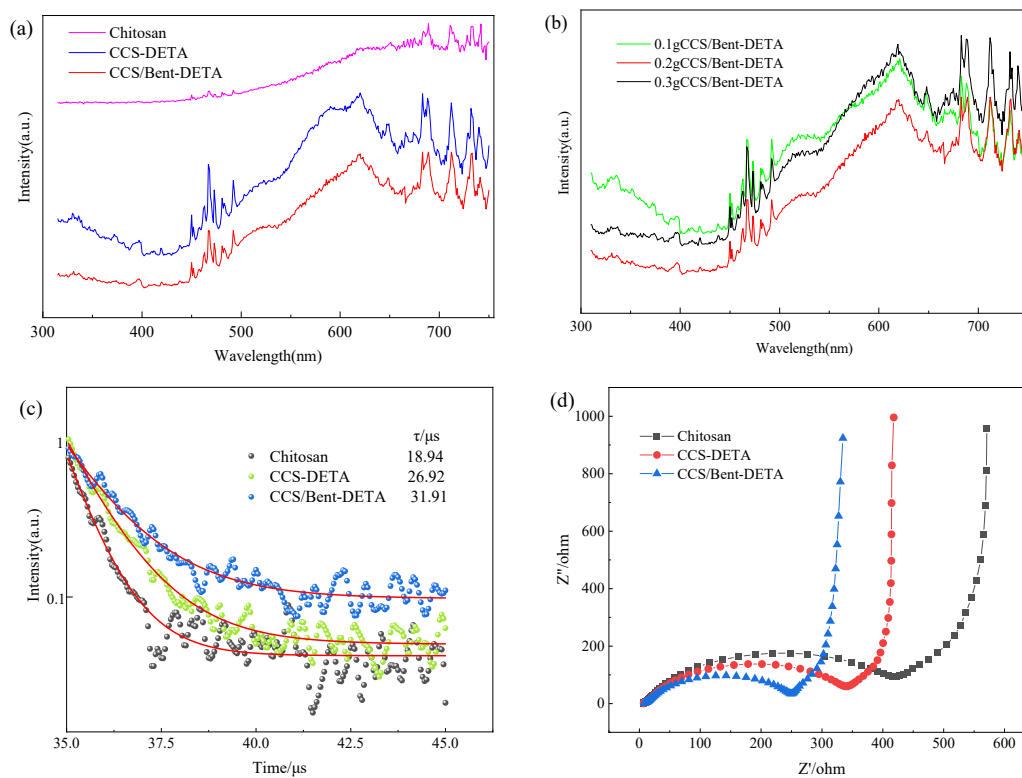


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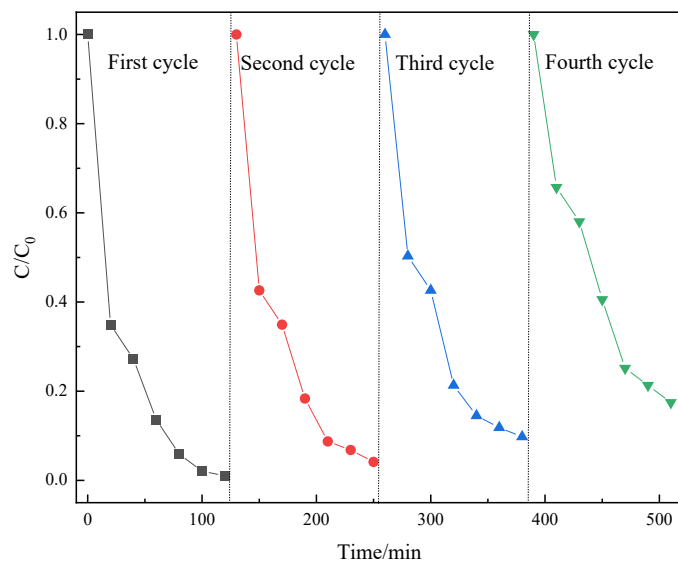


Fig. S3 Photocatalytic cycle performance of CCS/Bent-DETA for MO

Table.S1 Thermodynamic parameters of MO adsorbed by CCS/Bent-DETA

T/K	K_C	$\Delta G/(\text{kJ}\cdot\text{mol}^{-1})$	$\Delta H/(\text{kJ}\cdot\text{mol}^{-1})$	$\Delta S/(\text{J}(\text{mol}\cdot\text{K})^{-1})$
303.15	2.11	-1.81		
308.15	2.77	-2.51	42.46	146.36
313.15	3.70	-3.27		

Table. S2 Kinetic fitting parameters of CCS-DETA and CCS/Bent-DETA for MO

photocatalysis

Materials	Pseudo-first-order kinetic model		Pseudo-second-order kinetic model	
	$k_1(\text{min}^{-1})$	R^2	$k_2(\text{L}\cdot\text{mg}^{-1}\cdot\text{min}^{-1})$	R^2
CCS-DETA	0.0117	0.9129	0.0569	0.9029
CCS/Bent-DETA	0.0491	0.9912	0.0979	0.9889