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New metal-free catalytic degradation systems with carbon dots for

thymol blue

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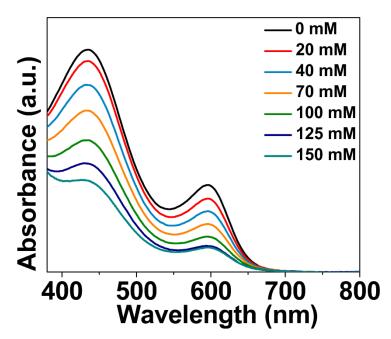


Fig S1 the UV-vis spectra of TB in the CDs/ H_2O_2 system with different H_2O_2 concentration after 70 min at room temperature.

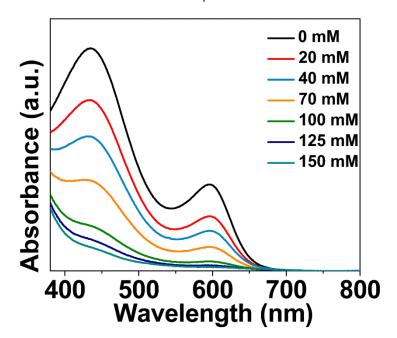


Fig S2: the UV-vis spectra of TB in the CDs/ H_2O_2/KI system with fixed KI concentration (1 mM) and different H_2O_2 concentration after 70 min at room temperature.

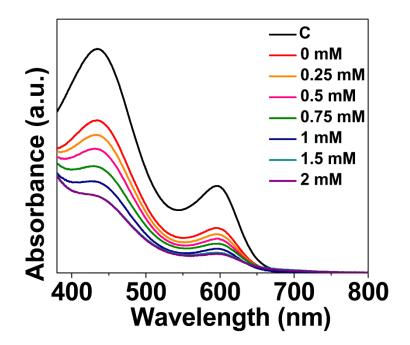


Fig S3: The UV-vis spectra of TB in the CDs/H₂O₂/KI system with fixed H₂O₂ concentration (70 mM) and different KI concentration(0-2 mM) after 70 min in room temperature. And C presents the spectra of TB in the mix solution of CDs and TB after 70 min in room temperature.

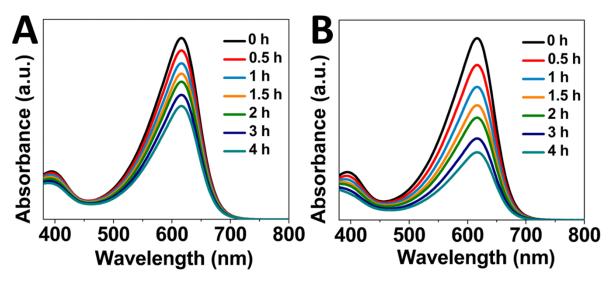


Fig S4: The UV-vis spectra of bromothymol blue in (A) CDs/H_2O_2 system and (B) $CDs/H_2O_2/KI$ system as a function of time during the catalytic degradation.