

Copper-Doped Carbon Nanodots with Superior Photocatalysis,

Directly Obtained from Chromium-Copper-Arsenic-Treated

Wood Waste

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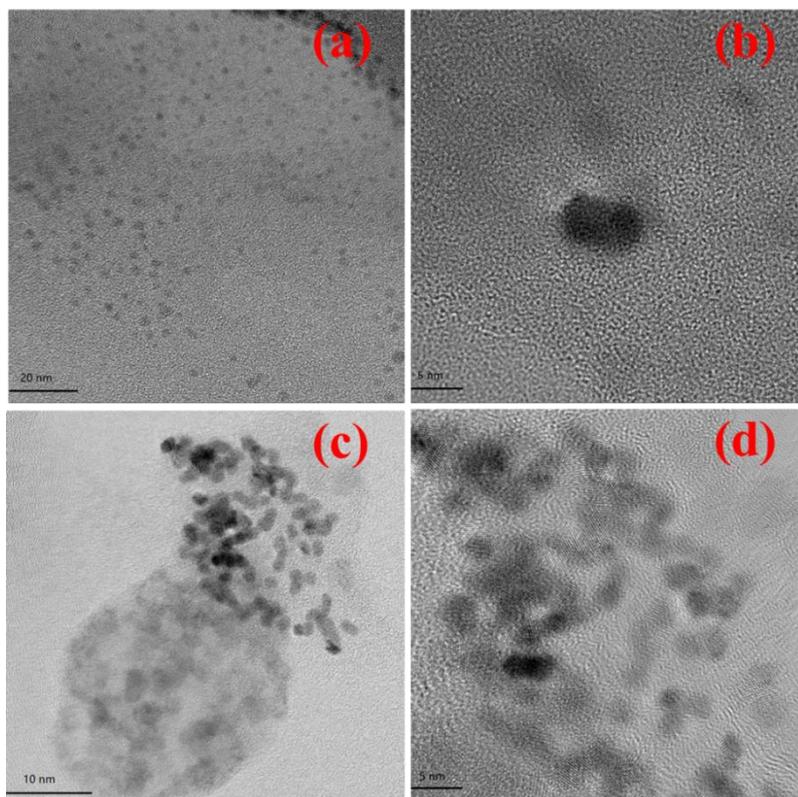


Fig. S1 HR-TEM images of the synthesized CDs; (a) and (b) W-CDs at 20 and 5 nm scale; (c) and (d) Y-CDs at 10 and 5 nm scale, respectively.

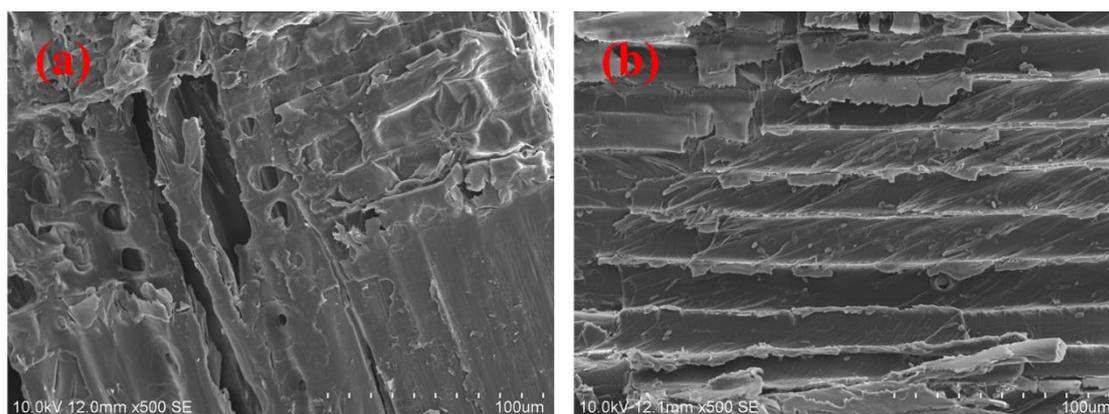


Fig. S2 SEM images of CCA-treated wood, (a) before treatment and (b) after treatment using yeasts.

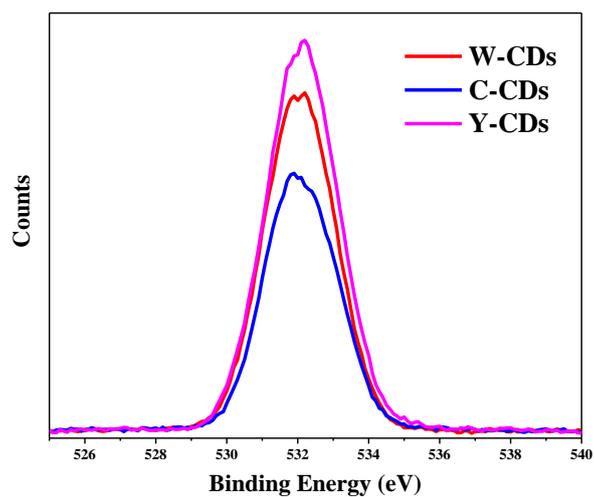


Fig. S3 High resolution XP spectrum of O1s of W-CDs, C-CDs, and Y-CDs.

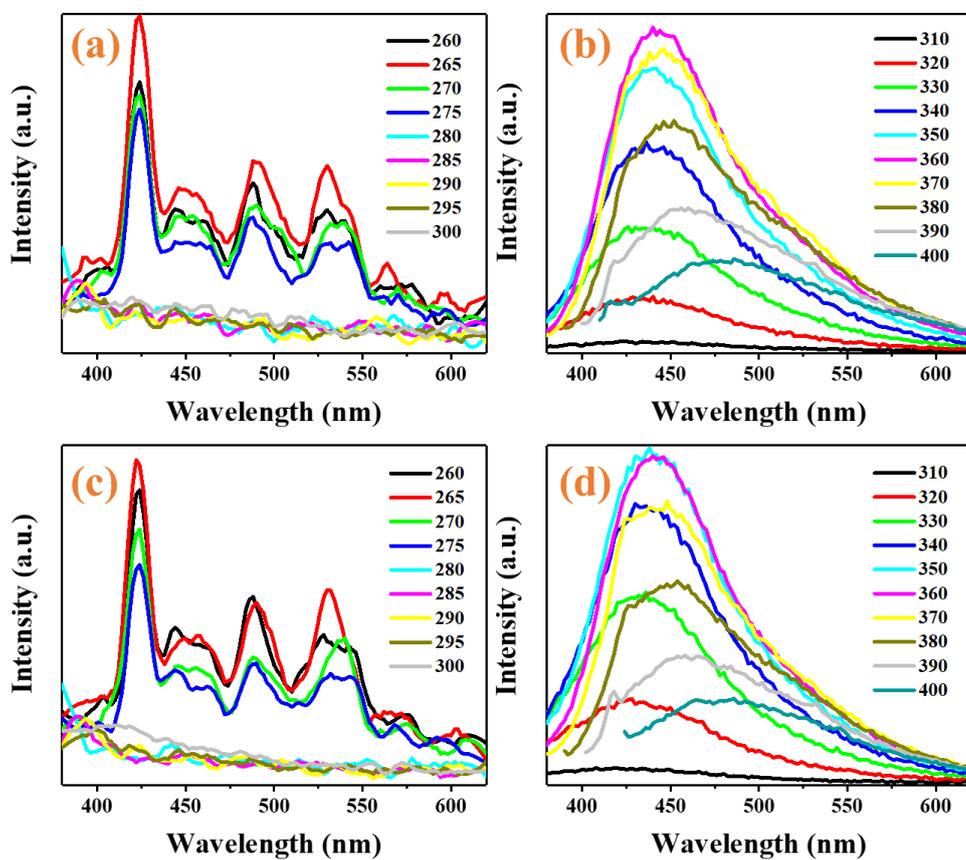


Fig. S4 (a) Fluorescence spectra of synthesized CDs at different excitation wavelengths from 260 to 300 nm and (b) from 310 to 400 nm for W-CDs; (c) from 260 to 300 nm and (d) from 310 to 400 nm for Y-CDs.

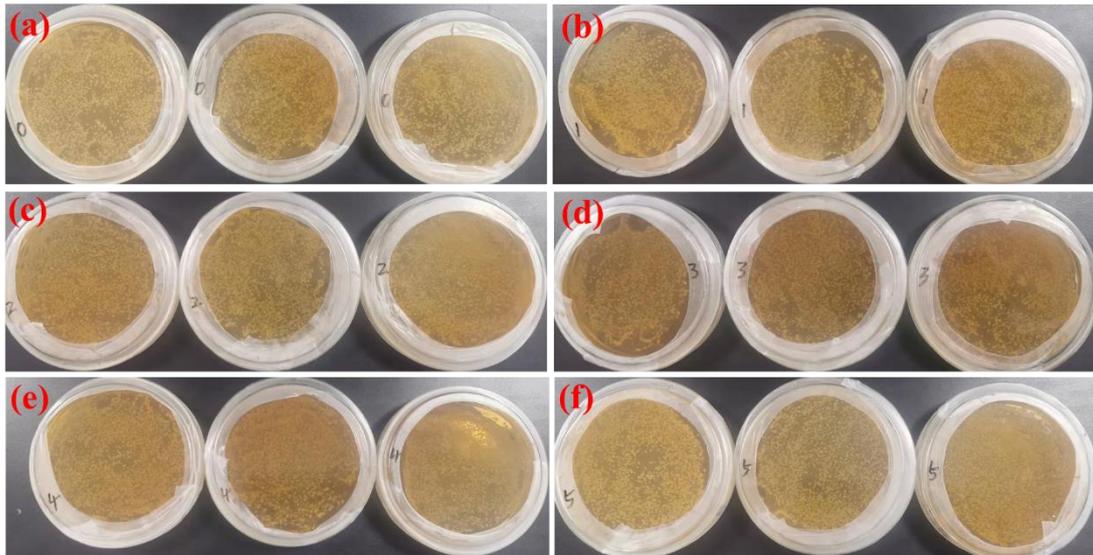


Fig. S5 digital images of growth characteristics of *Saccharomyces cerevisiae*, (a) the medium without CDs and (b)-(f) the medium with adding 5, 10, 25, 50, 75 $\mu\text{L}/\text{mL}$ of C-CDs, respectively.

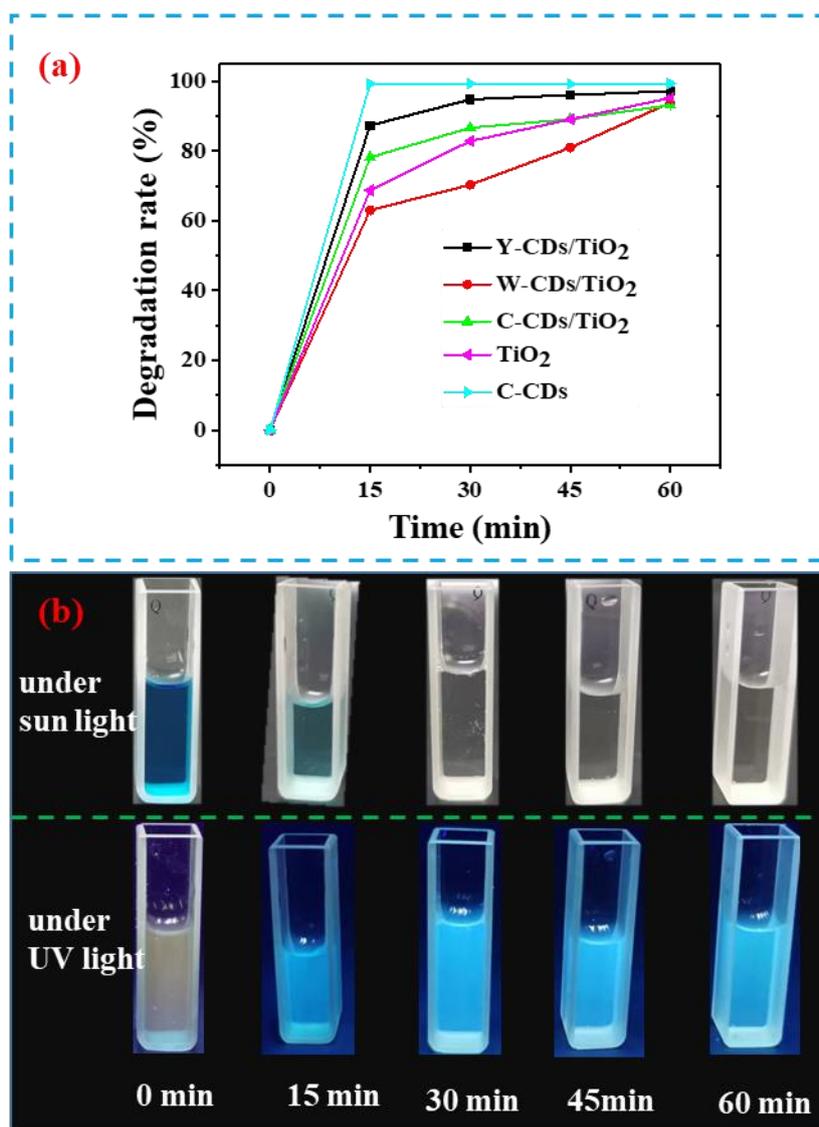


Fig. S6 (a) Degradation efficiency of MB ($15 \text{ mg}\cdot\text{L}^{-1}$) with different catalysts under 365 nm UV light; (b) digital images of the degradation of MB using the synthesized C-CDs at different time intervals under room light or in the 365 nm UV light.