

Supplementary Information

Visible-light photocatalysis on C-doped ZnO derived from polymer-assisted pyrolysis

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Element PDOS of Wurtzite ZnO crystal:

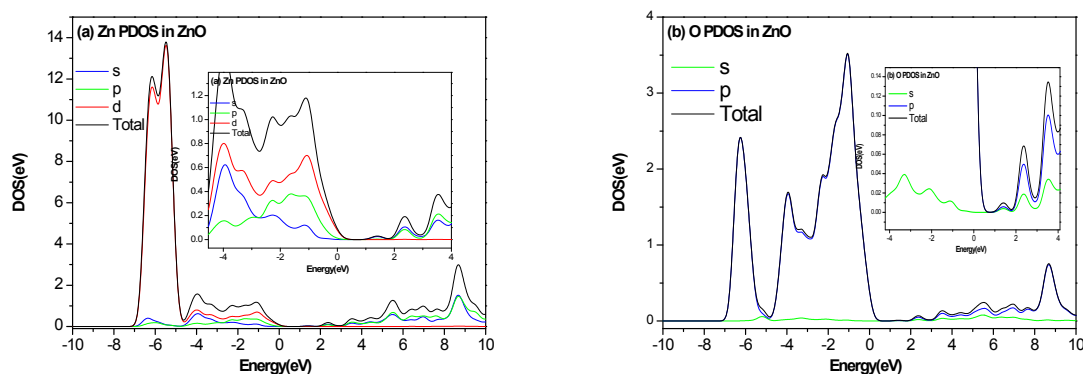


Fig.S1 PDOS of (a)Zn and (b) O in ZnO Wurtzite crystal. Insets correspond to amplified PDOS

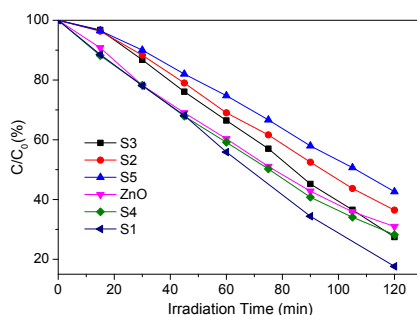


Fig.S2 Methylene Blue Photodegradation over ZnO and C-doped ZnO with different C-doping levels

Note:

The samples S1, S2, S3, S4 and S5 (heavy C-doped ZnO used in this paper) corresponded to F127 weight were 0.15, 0.35, 0.5, 0.6 and 0.75 grams respectively. It clearly showed only the trace amount of C-dopant may promote the visible-responsive photodegradation activity of the series of C-doped ZnO. Significantly reduced photoactivity was observed on the heaviest doped ZnO in this research which was adopted for this article to discuss decreased dye-sensitisation by heavy C-doping effects.

