

Supplementary Material

The role of oxygen vacancy over ZnCr-layered double oxide in enhancing solar light-driven photocatalytic degradation of bisphenol A

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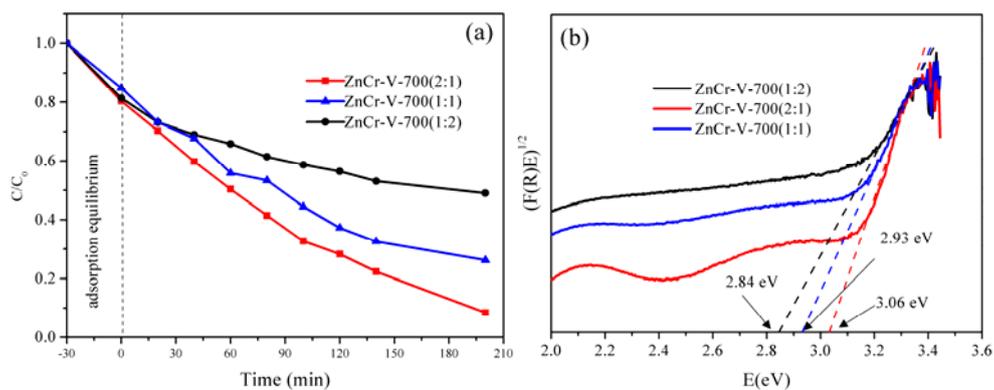


Fig. S1 (a) Effects of Zn/Cr molar ratio on the photocatalytic activities of samples by degradation of BPA under solar light irradiation. Reaction conditions: $[BPA]_0 = 10 \text{ mg L}^{-1}$, catalyst dosage = 0.5 g L^{-1} , initial pH = 7.14. (b) the corresponding Tauc plot of samples.

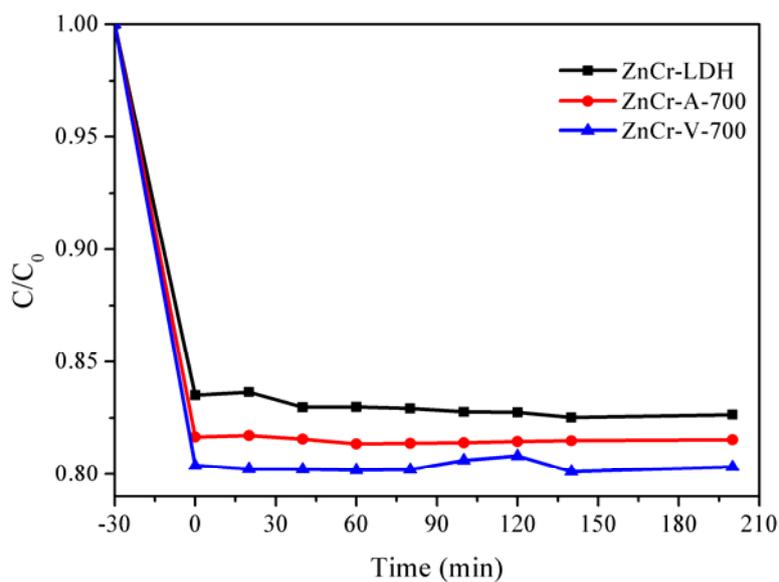


Fig. S2 The adsorption of BPA on different photocatalyst

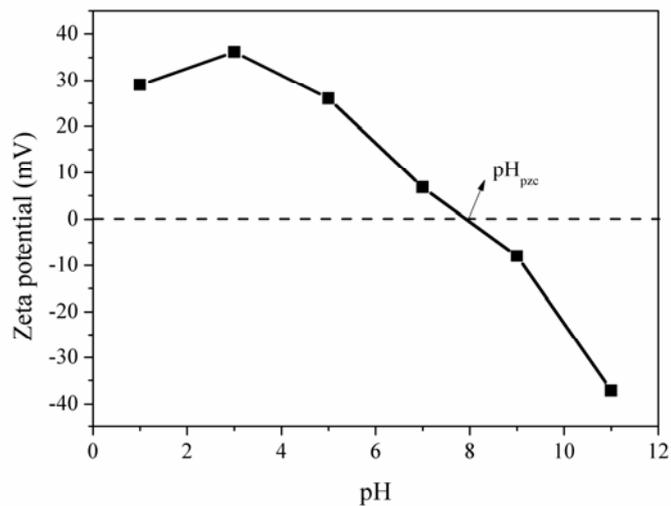


Fig. S3 Zeta potentials as a function of pH for ZnCr-V-700

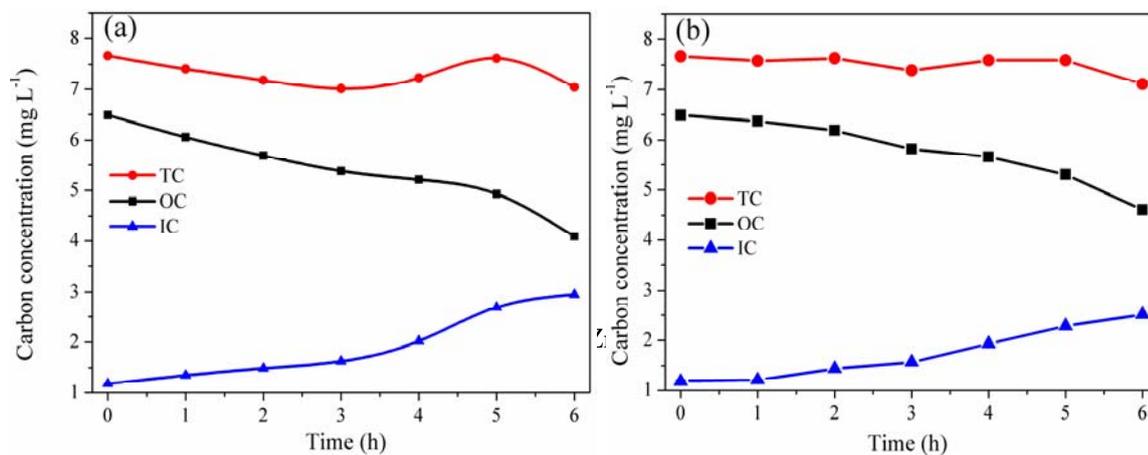


Fig. S4 The composition of the carbon in the solution of ZnCr-V-700(a) and ZnCr-A-700(b)

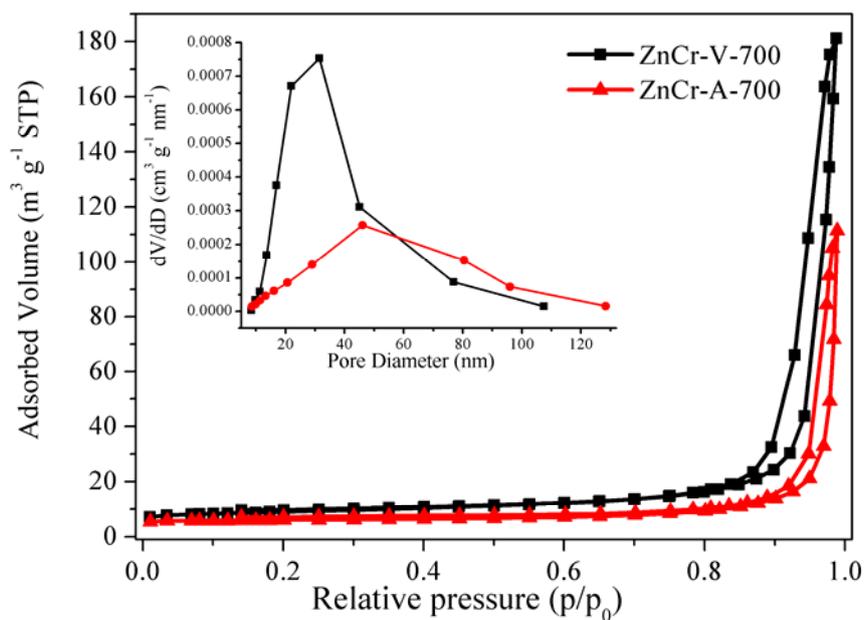


Fig. S5 N₂ adsorption and desorption isotherms and corresponding pore size distribution curves (inset) of ZnCr-V-700 and ZnCr-A-700

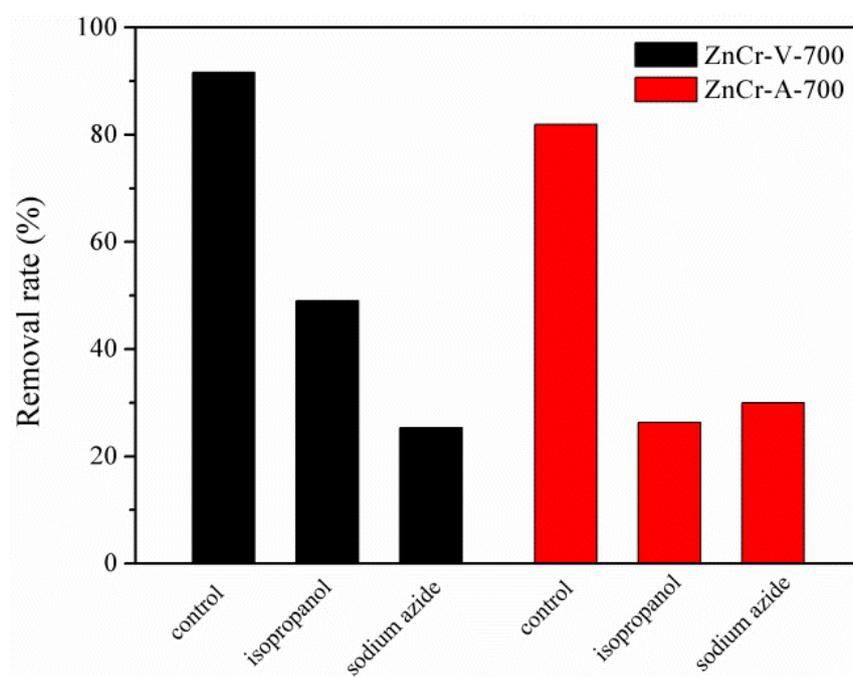


Fig. S6 (a) photo-degradation of BPA by ZnCr-V-700 and ZnCr-A-700 in the presence of radical scavenging species.

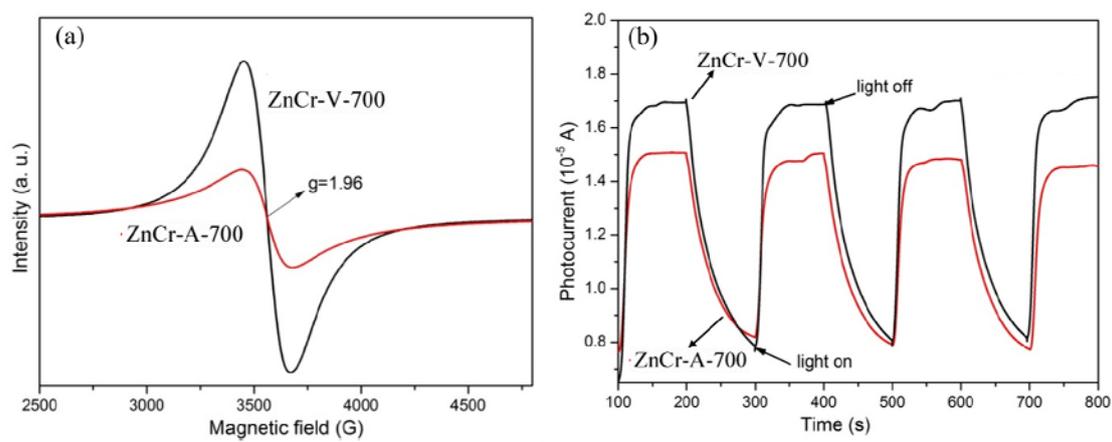


Fig. S7 (a) EPR spectra and (b) Transient photocurrent responses of ZnCr-V-700 and ZnCr-A-700

Table S1 The main elements percentage ratio for all samples detected by EDS

Samples	Zn	Cr	O
ZnCr-LDH	22.81	11.35	65.84
ZnCr-A-700	32.05	15.6	52.26
ZnCr-V-700	34.84	17.42	47.74