Electronic supplementary information (ESI)

Graphene Oxide Coated Coordination Polymer Nanobelt Composite Material: a New Kind of Visible Light Active and High Efficient Photocatalyst for Cr (VI) Reduction

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Table S1 Crystal data and structure refinement results for **CP**

	CP
Empirical formula	$C_{30}H_{22}N_4O_4Zn$
Formula weight	567.89
Crystal system	Monoclinic
Space group	*C* 2/c
a/Å	15.1755(11)
b/Å	22.2665(17)
c/Å	8.1466(6)
α/º	90
β/º	110.2820(10)
γ/º	90
V/Å^3	2582.1(3)
Z	4
F (000)	1168
Reflections collected	7561
Reflections unique	2270
R (int)	0.0304
Goodness-of-fit on F^2	1.118
R_1 [$I > 2\sigma(I)$]	0.0634
wR_2 [$I > 2\sigma(I)$]	0.1857
R_1 (all data)	0.0758
wR_2 (all data)	0.1985

Note. $R_1 = \Sigma||F_o|-|F_c||/\Sigma|F_o|$; $wR_2 = \Sigma[w(F_o^2-F_c^2)^2]/\Sigma[w(F_o^2)^2]^{1/2}$

Table S2 Selected bond lengths (Å) and angles (º) for **CP**

Bond Lengths			
Zn(1)-O(1)	2.095(4)	Zn(1)-O(1)#1	2.095(4)
Zn(1)-O(2)	2.203(4)	Zn(1)-O(2)#1	2.203(4)
Zn(1)-N(1)	2.102(4)	Zn(1)-N(1)#1	2.102(4)
Bond Angles			
O(1)#1-Zn(1)-O(1)	146.2(2)	O(1)#1-Zn(1)-N(1)#1	109.73(15)
O(1)-Zn(1)-N(1)#1	96.63(17)	O(1)#1-Zn(1)-N(1)	96.63(17)
O(1)-Zn(1)-N(1)	109.73(15)	N(1)#1-Zn(1)-N(1)	77.7(2)
O(1)#1-Zn(1)-O(2)#1	60.10(19)	O(1)-Zn(1)-O(2)#1	99.18(18)
N(1)#1-Zn(1)-O(2)#1	92.27(16)	N(1)-Zn(1)-O(2)#1	150.20(17)
O(1)#1-Zn(1)-O(2)	99.18(18)	O(1)-Zn(1)-O(2)	60.10(19)
N(1)#1-Zn(1)-O(2)	150.20(17)	N(1)-Zn(1)-O(2)	92.27(16)
O(2)#1-Zn(1)-O(2)	108.7(2)		

Symmetry transformations used to generate equivalent atoms for **CP**: #1 -x+1, y, -z+5/2.

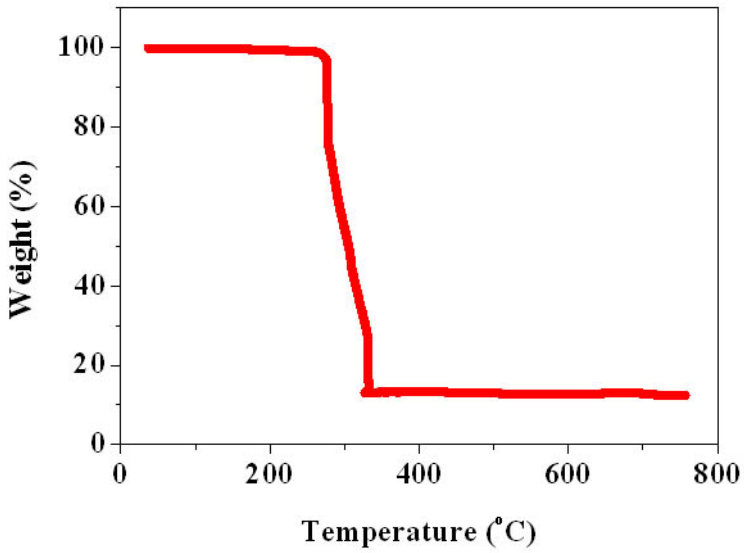

Figure S1 TGA of **CP**.

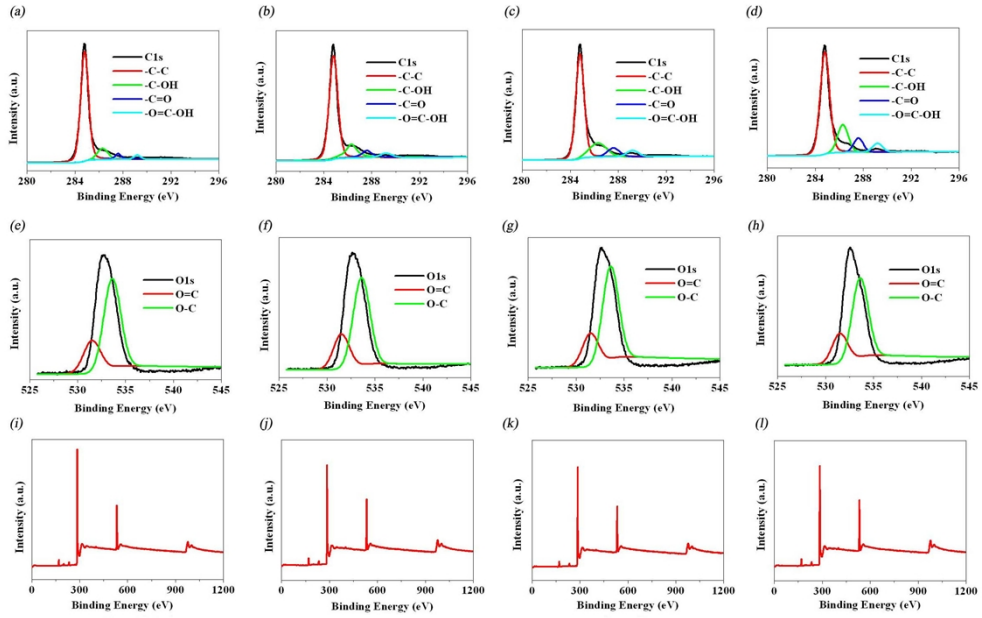

Figure S2 (a) C1s of **GO(A)**; (b) C1s of **GO(B)**; (c) C1s of **GO(C)**; (d) C1s of **GO(D)**; (e) O1s of **GO(A)**; (f) O1s of **GO(B)**; (g) O1s of **GO(C)**; (h) O1s of **GO(D)**; (i) XPS survey of **GO(A)**; (g) XPS survey of **GO(B)**; (k) XPS survey of **GO(C)**; (l) XPS survey of **GO(D)**.

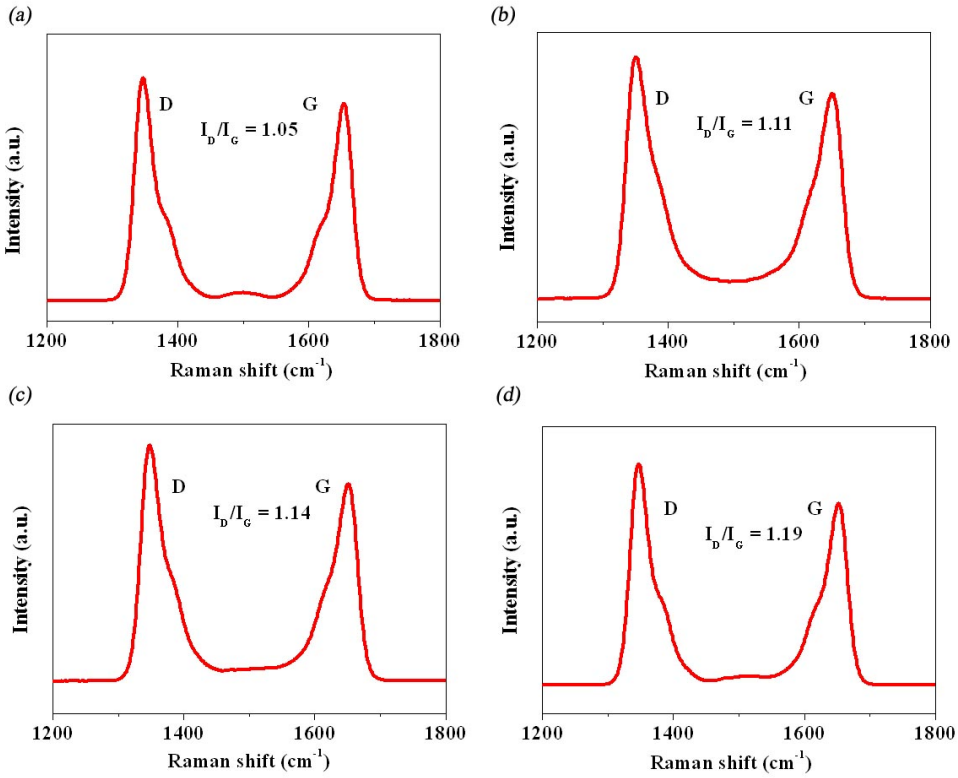

Figure S3 Raman spectra (a) **GO(A)**; (b) **GO(B)**; (c) **GO(C)**; (d) **GO(D)**.

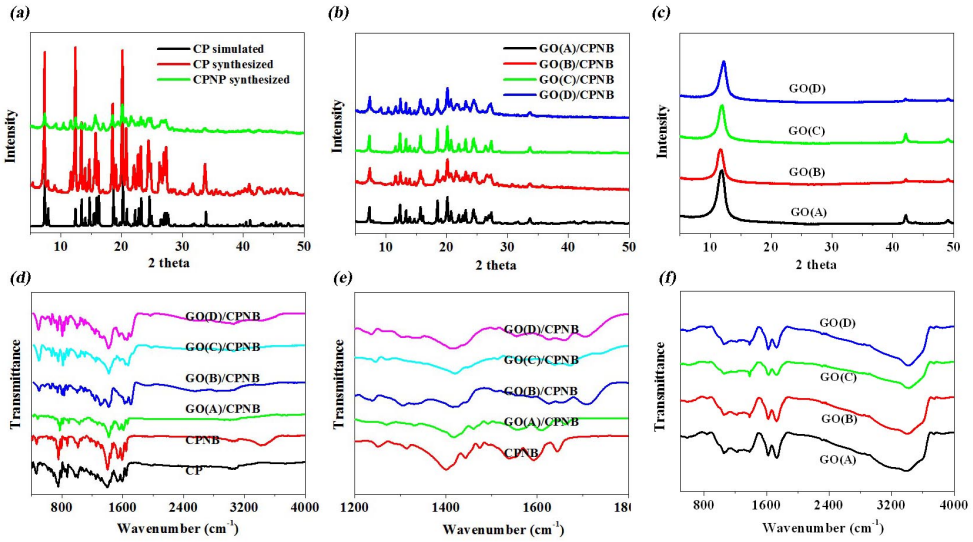

Figure S4 (a) PXRD patterns of **CP** and **CPNB**; (b) PXRD patterns of **GO/CPNB**; (c) PXRD patterns of **GO**; (d) FTIR of **CPNB** and **GO/CPNB**; (e) Enlarged FTIR of **CPNB** and **GO/CPNB**; (f) FTIR of **GO**.

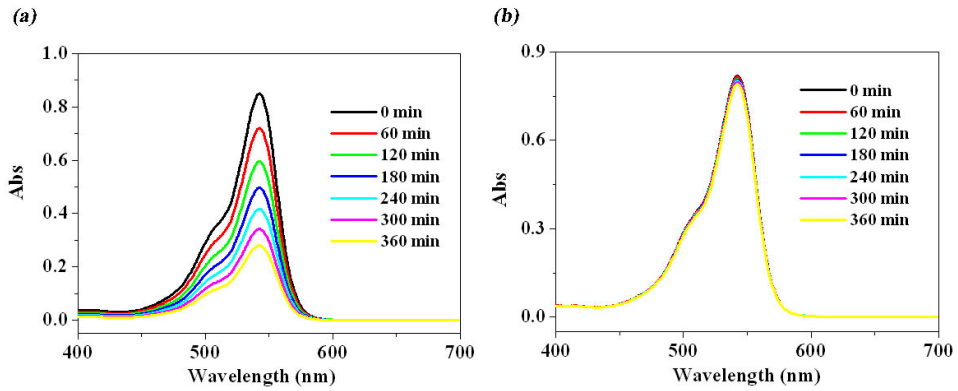

Figure S5 Reduction rate as the function of time by **CPNB** under VIS and UV light.