Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Facile transformation of low cost melamine-oxalic acid into porous graphitic carbon nitride with high visible photocatalytic performance.

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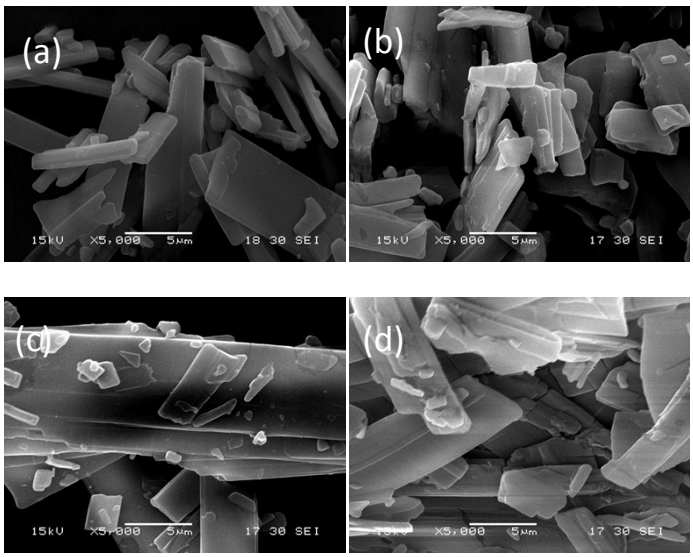


Fig. S1 SEM images of (a) MO-2, (b) MO-3, (c) MO-5 and (d) MO-6.

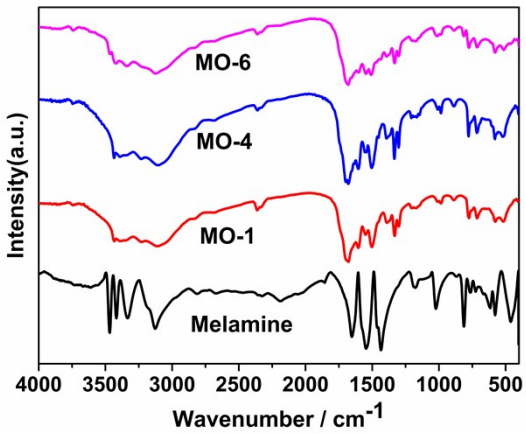
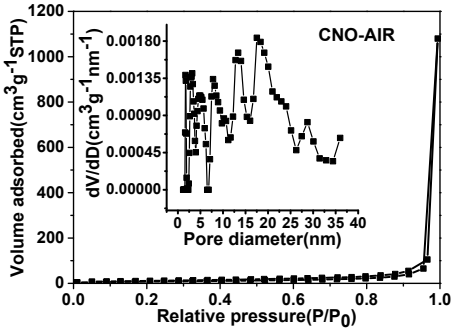
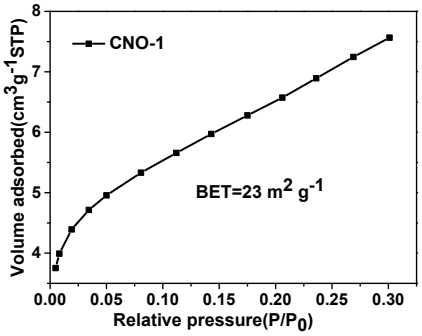
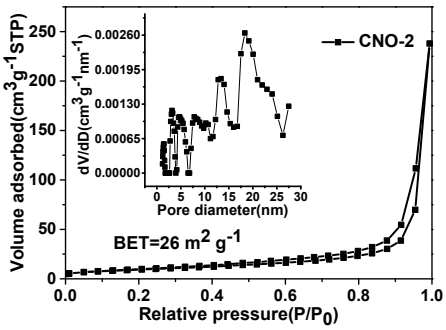
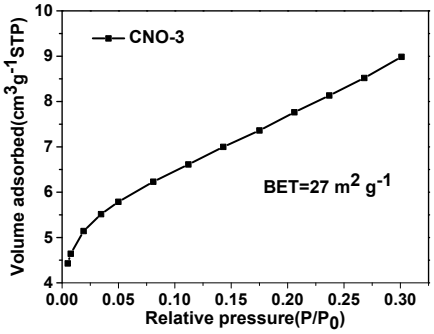


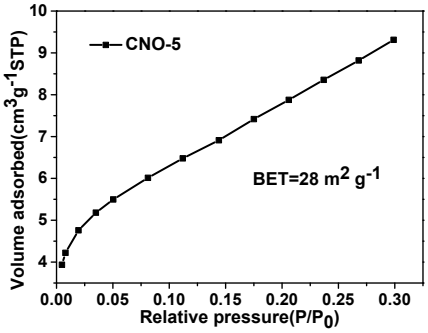
Fig. S2 FT-IR spectra of melamine, MO-1, MO-4 and MO-6.

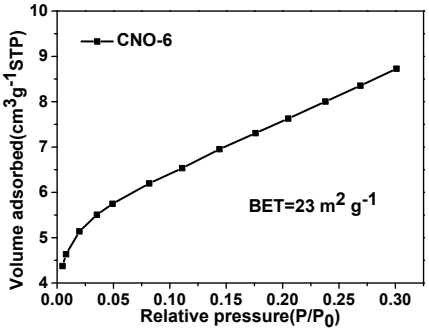


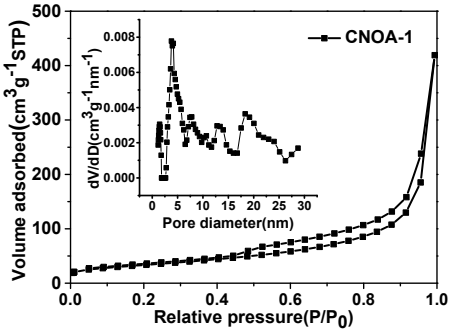


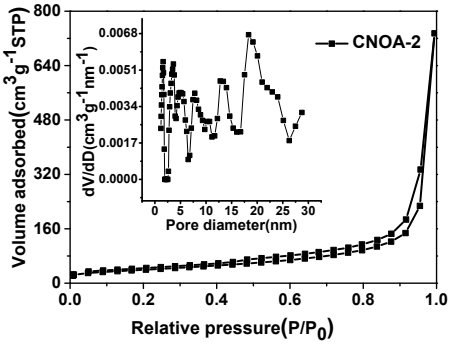

CNO-2
BET=26 m2 g-1
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)
dV/dD(cm3g-1nm-1)
Pore diameter(nm)

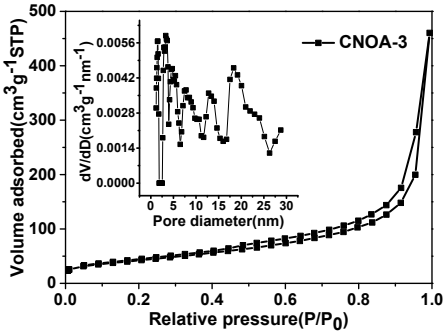

CNO-3
BET=27 m2 g-1
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)

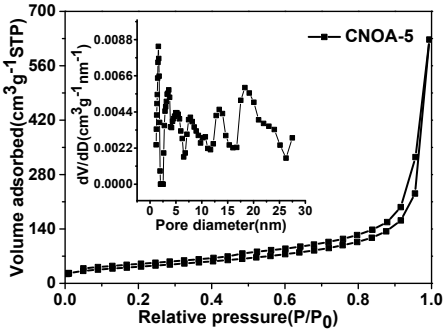

CNO-5
BET=28 m2 g-1
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)


CNO-6
BET=23 m2 g-1
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)


CNOA-1
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)
dV/dD(cm3g-1nm-1)
Pore diameter(nm)


CNOA-2
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)
dV/dD(cm3g-1nm-1)
Pore diameter(nm)


CNOA-3
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)
dV/dD(cm3g-1nm-1)
Pore diameter(nm)


CNOA-5
Volume adsorbed(cm3g-1STP)
Relative pressure(P/P0)
dV/dD(cm3g-1nm-1)
Pore diameter(nm)

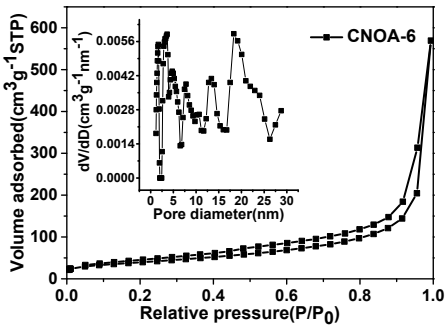


Fig. S3 Nitrogen adsorption / desorption isotherm and corresponding pore size distribution of CNO-AIR, CNO-2, CNOA-1, CNOA-2, CNOA-3, CNOA-5 and CNOA-6, nitrogen adsorption of CNO-1, CNO-3, CNO-5 and CNO-6.

Table S1 Elemental analysis results of samples

sample	C (wt%)	N (wt%)	H (wt%)	C/N (atomic)
CNO-4	34.04	58.89	2.03	0.674
CNOA-4	31.74	55.15	2.22	0.671

Fig. S4 optical images of different samples.

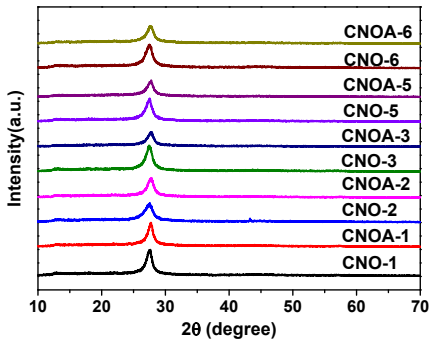


Fig. S5 XRD patters of CNO-X and CNOA-X (X=1, 2, 3, 5 and 6).

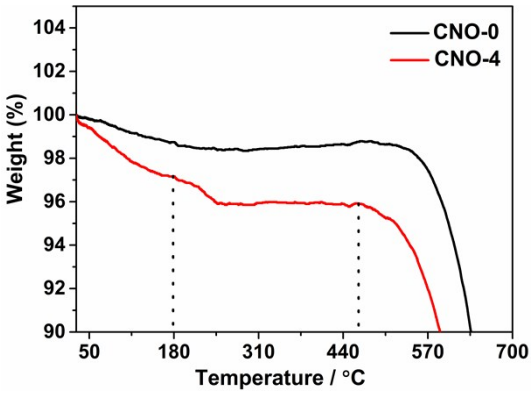


Fig. S6 TG thermograms for heating CNO-0 and CNO-4 in air.

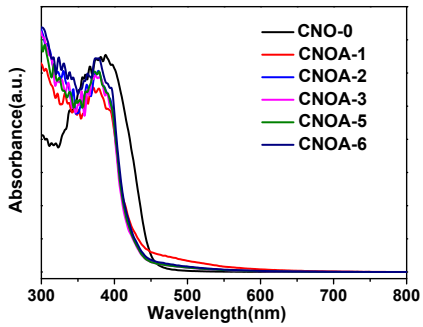


Fig. S7 UV-vis absorption spectra of the samples of CNO-0 and CNOA-X (X=1, 2, 3, 5 and 6).

Table S2. Best fitted parameters of time-resolved PL spectra

sample	Decay life times (ns)			Fractional contribution		
	τ_1	τ_2	τ_3	f_1	f_2	f_3
CN0-0	5.11	1.15	31.30	48.44	34.26	17.29
CNOA-4	2.53	0.41	11.14	46.82	29.96	23.23
CNO-4	1.35	0.16	7.00	36.48	42.66	20.86
CNO-AIR	1.52	0.24	8.10	37.80	44.78	17.42