

Fig. S1 The schematic representation of the preparative route of catalysts.

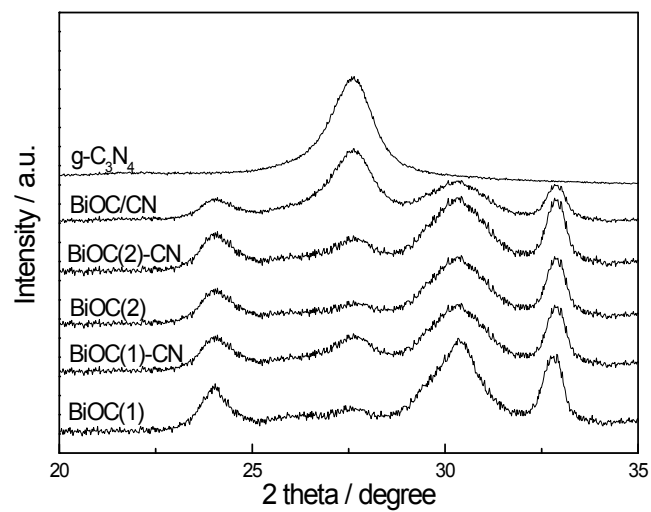


Fig. S2 The enlarged figure of XRD patterns with diffraction angle 20-35 degree.

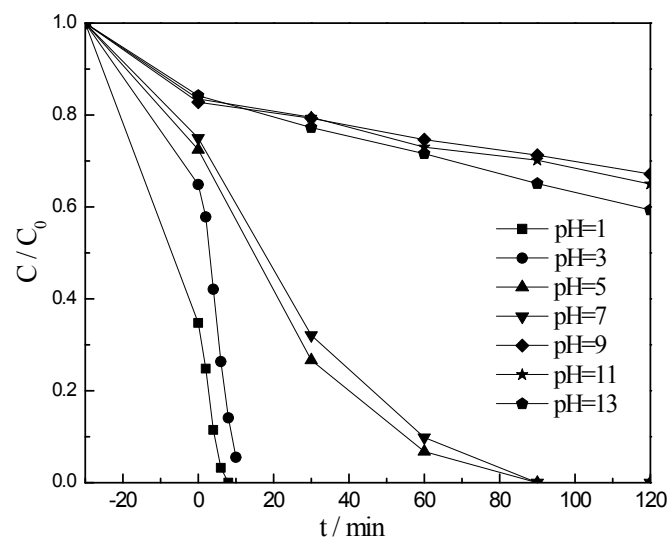


Fig. S3 The influence of pH value on the photocatalytic RhB degradation over BiOC(2)-CN.

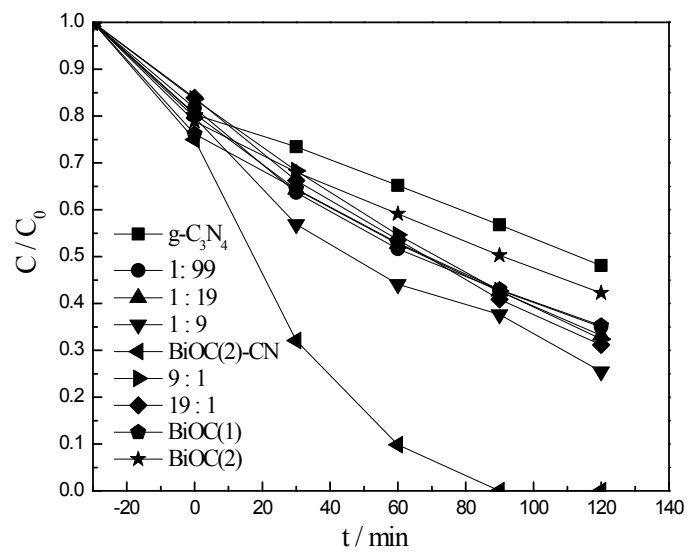


Fig. S4 The influence of mass ratio of $g-C_3N_4$ to $Bi_2O_2CO_3$ in prepared $g-C_3N_4/Bi_2O_2CO_3$ nanocomposites on the photocatalytic RhB degradation.

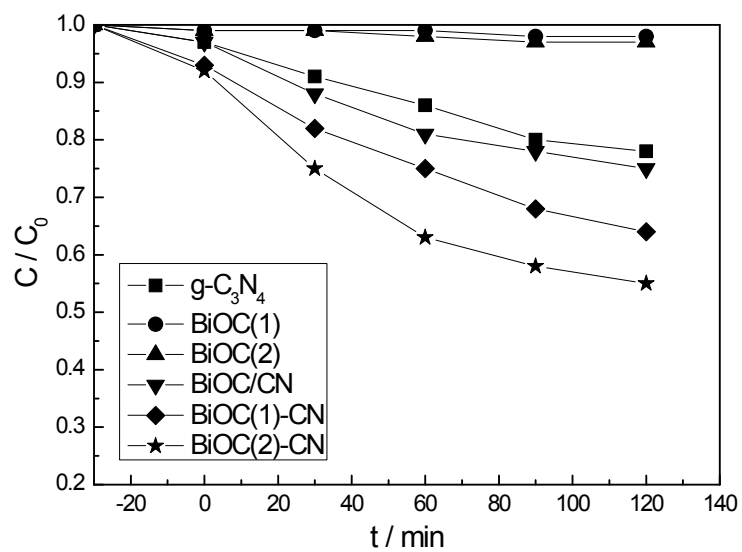


Fig. S5 Photocatalytic performances of g-C₃N₄, BiOC(1), BiOC(2), BiOC/CN and g-C₃N₄/Bi₂O₂CO₃ nanocomposites in the degradation of phenol under visible light irradiation.

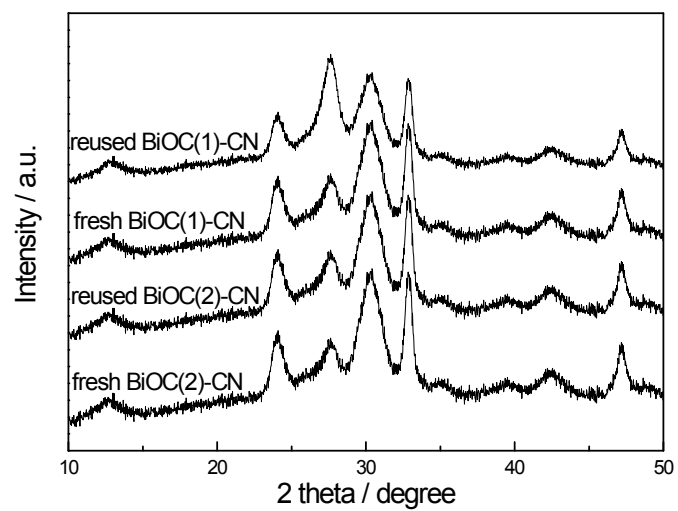


Fig. S6 The XRD patterns of fresh and reused BiOC(1) and BiOC(2).

Table S1 The rate constants of photocatalytic RhB and phenol degradation over as-prepared catalysts

Catalyst	g-C ₃ N ₄	BiOC(1)	BiOC(2)	BiOC/CN	BiOC(1)-CN	BiOC(2)-CN
RhB degradation (min ⁻¹)	0.00427	0.00649	0.00517	0.00818	0.01259	0.03181
Phenol degradation (min ⁻¹)	0.00085	--	--	0.00091	0.00202	0.00389