

Experimental study on Co-C₃N₄/BiPO₄ composite for efficient photocatalytic water
splitting

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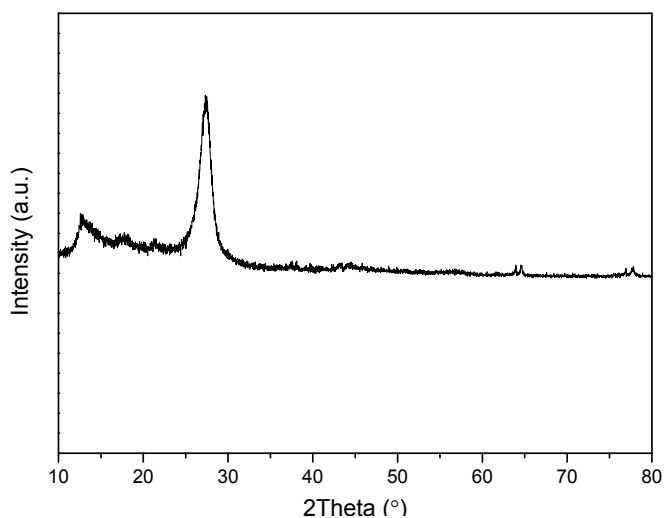


Figure S1 XRD pattern of g-C₃N₄

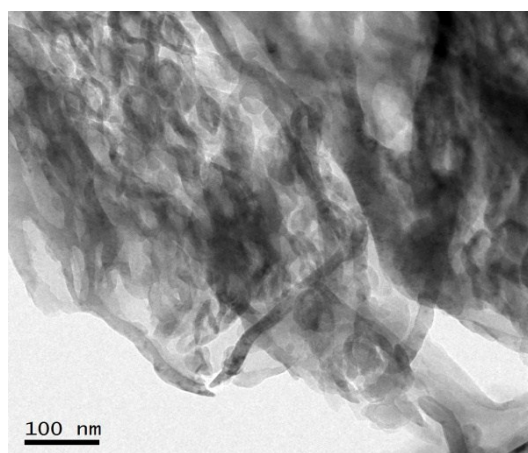


Figure S2 TEM image of fresh $g\text{-C}_3\text{N}_4$

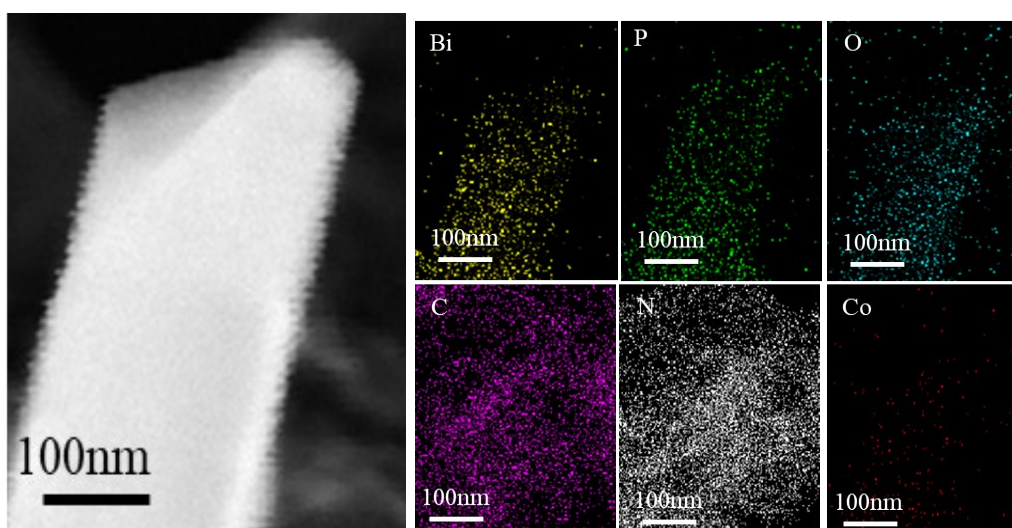


Figure S3 The EDS mapping images of 5-Co-CN/BP composite.

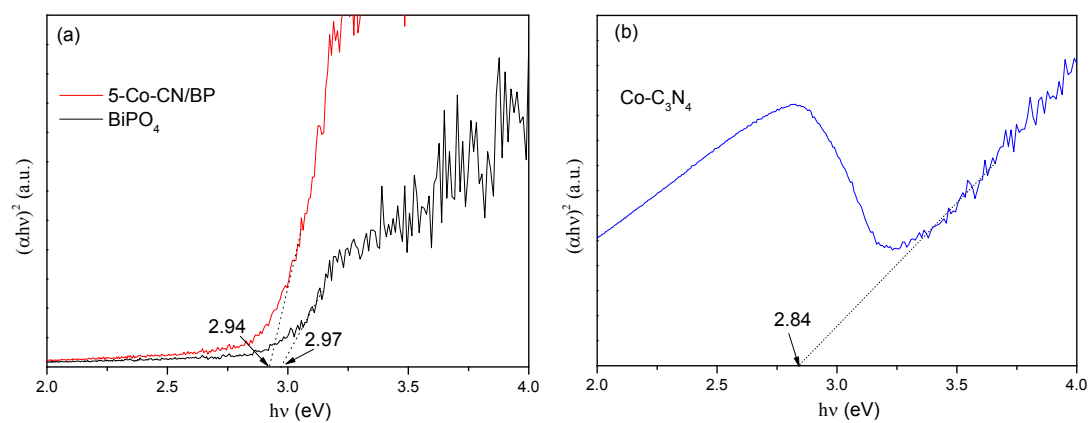


Figure S4 Plots of $(\alpha h\nu)^2$ versus photon energy ($h\nu$) for the band gap energies of (a) BiPO_4 , 5-Co-CN/BP and (b) $\text{Co-C}_3\text{N}_4$.

Table S1. Atomic relative content (%) of prepared samples from XPS characterization

Sample	C ₃ N ₄	Co-C ₃ N ₄	5-Co-CN/BP	10-Co-CN/BP	BiPO ₄
N	52.66	50.43	7.65	15.99	-
C	44.28	46.27	24.59	24.91	-
O	3.05	2.31	47.03	40.35	68.36
Co	-	0.99	0.15	0.35	-
P	-	-	12.13	10.70	18.56
Bi	-	-	8.45	7.70	13.08

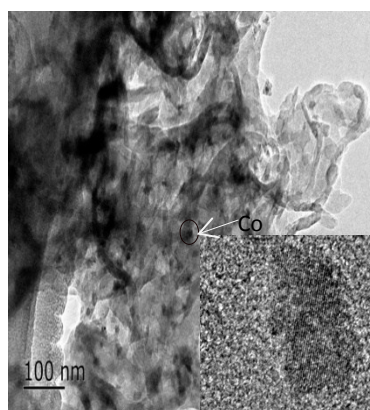


Figure S5 HRTEM image of Co-C₃N₄