Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.
This journal is © the Partner Organisations 2020

Supporting information for

Facile fabrication of BiOCl nanoplates with high exposure {001} facets for efficient photocatalytic degradation of nitro explosives

Jing Yan[a], Bo Jin[a]*, Ping Zhao[a], and Rufang Peng[a]

[a]State Key Laboratory of Environment-friendly Energy Materials, School of Materials Science and Engineering, Southwest University of Science and Technology, Mianyang, 621010, China

*E-mail: jinbo0428@163.com

Table. S1 The sizes and thicknesses of products with different CA additions.

Products	Size(nm)	Thicknesses(nm)
BC-0	200-500	30-60
BC-5	80-200	30-60
BC-10	60-180	20-50
BC-15	60-180	20-50

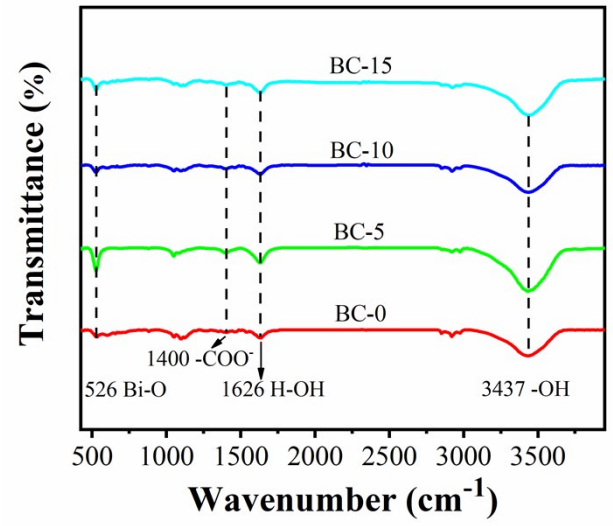

Fig. S1 The FT-IR spectra of the as-prepared samples.

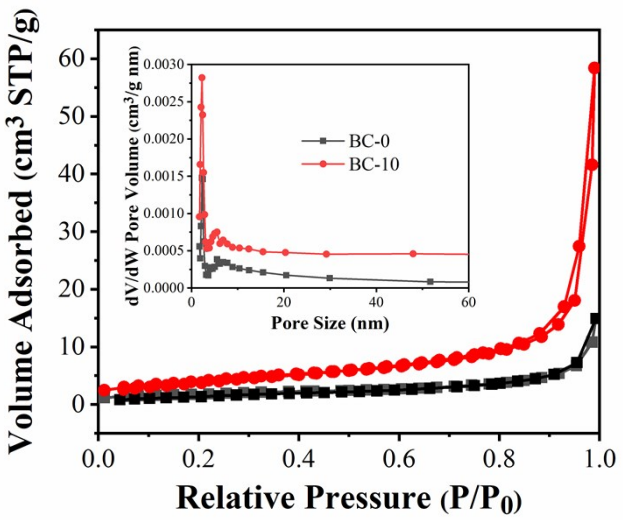

Fig. S2 Nitrogen adsorption-desorption isotherms and the corresponding pore-size distribution curves (inset) of BC-0 and BC-10.

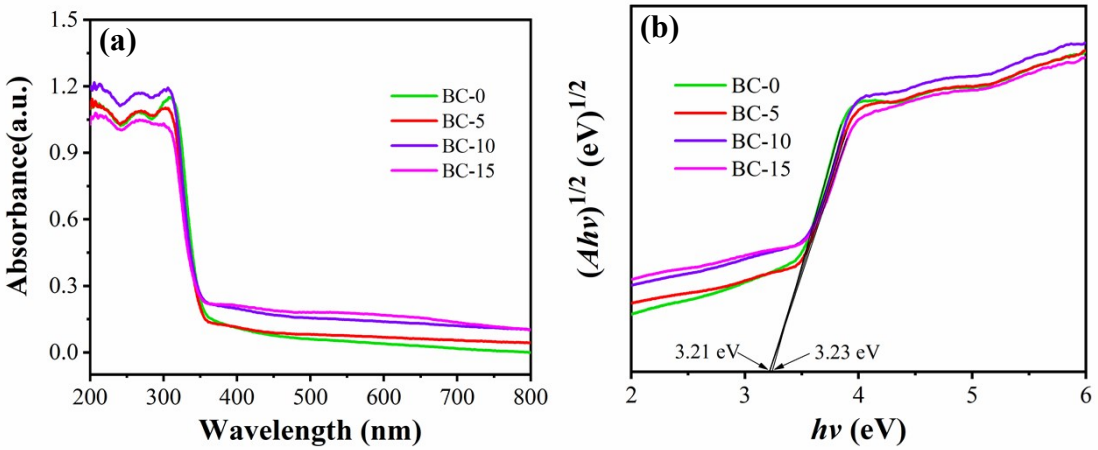

Fig. S3 (a) UV-vis absorption spectra and (b) band gap maps of different photocatalysts.

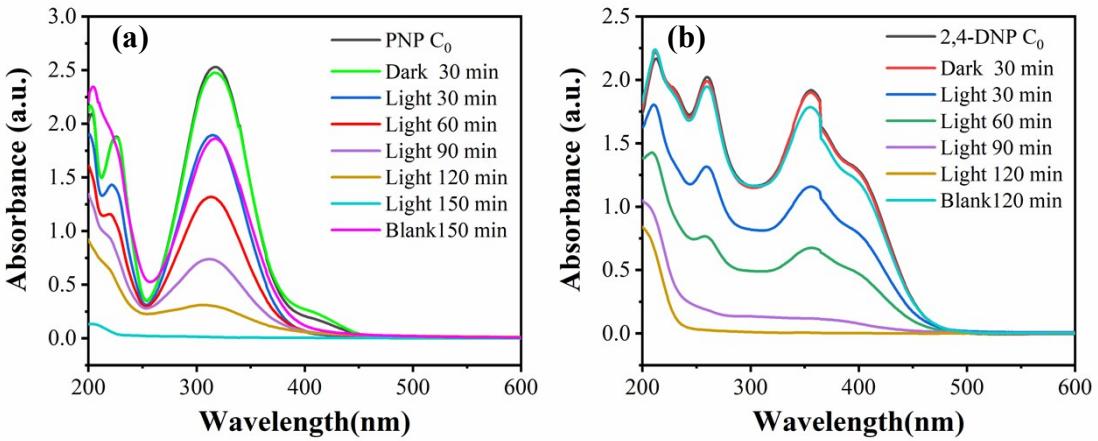

Fig. S4 Photocatalytic degradation of (a)PNP (C=40 mg/L) and (b) 2,4-DNP (C=40 mg/L) by BC-10 under simulated sunlight.

Table. S2 Comparison of degradation efficiency of nitro explosives with different catalysts.

Catalyst	Substrate	Concentration (mg/L)	Catalysts Concentration(g/L)	Reaction Time(min)	Reference
$BiOCl_{1-x}Br_x$	PNP	10	1	60	Qin et al.[48]
BiOCl/ $Ti_3C_2T_x$	PNP	20	0.6	50	Wang et al.[49]
$MoSe_2$	PNP	40	0.4	90	Huang et al.[4]
$MoSe_2$	2,4-DNP	40	0.4	150	Huang et al.[4]
MWCNTs/ TiO_2	2,4-DNP	38.8	8	150	Wang et al.[50]
MgO	2,4,6-TNP	30	0.2	124	Ali et al.[51]
Nano-TiO_2	TNT	80	5	1440	Li et al.[52]
BC-10	PNP	20	0.4	50	This work
BC-10	PNP	40	0.4	150	This work
BC-10	2,4-DNP	20	0.4	90	This work
BC-10	2,4-DNP	40	0.4	120	This work
BC-10	2,4,6-TNP	20	0.4	90	This work
BC-10	TNT	20	0.4	90	This work

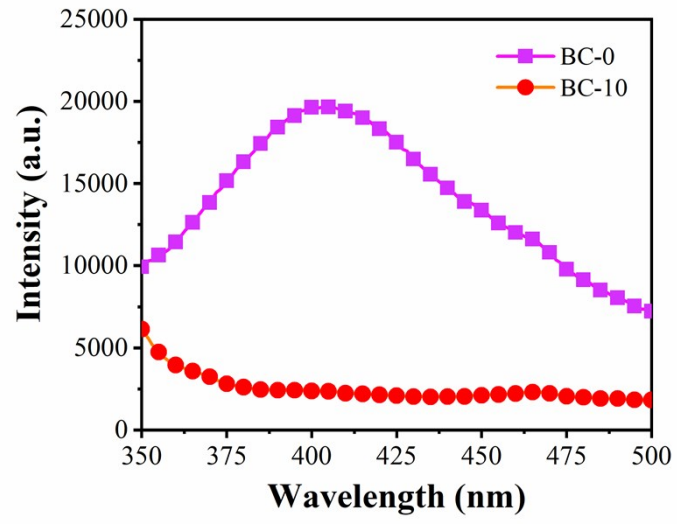

Fig. S5 The PL spectra of BC-0 and BC-10 (λ_{exc} = 320 nm).