

## Supporting Information

### **Bidirectional acceleration of carrier separation spatially via N-CQDs/atomically-thin BiOI nanosheets nanojunctions for manipulating active species in a photocatalytic process**

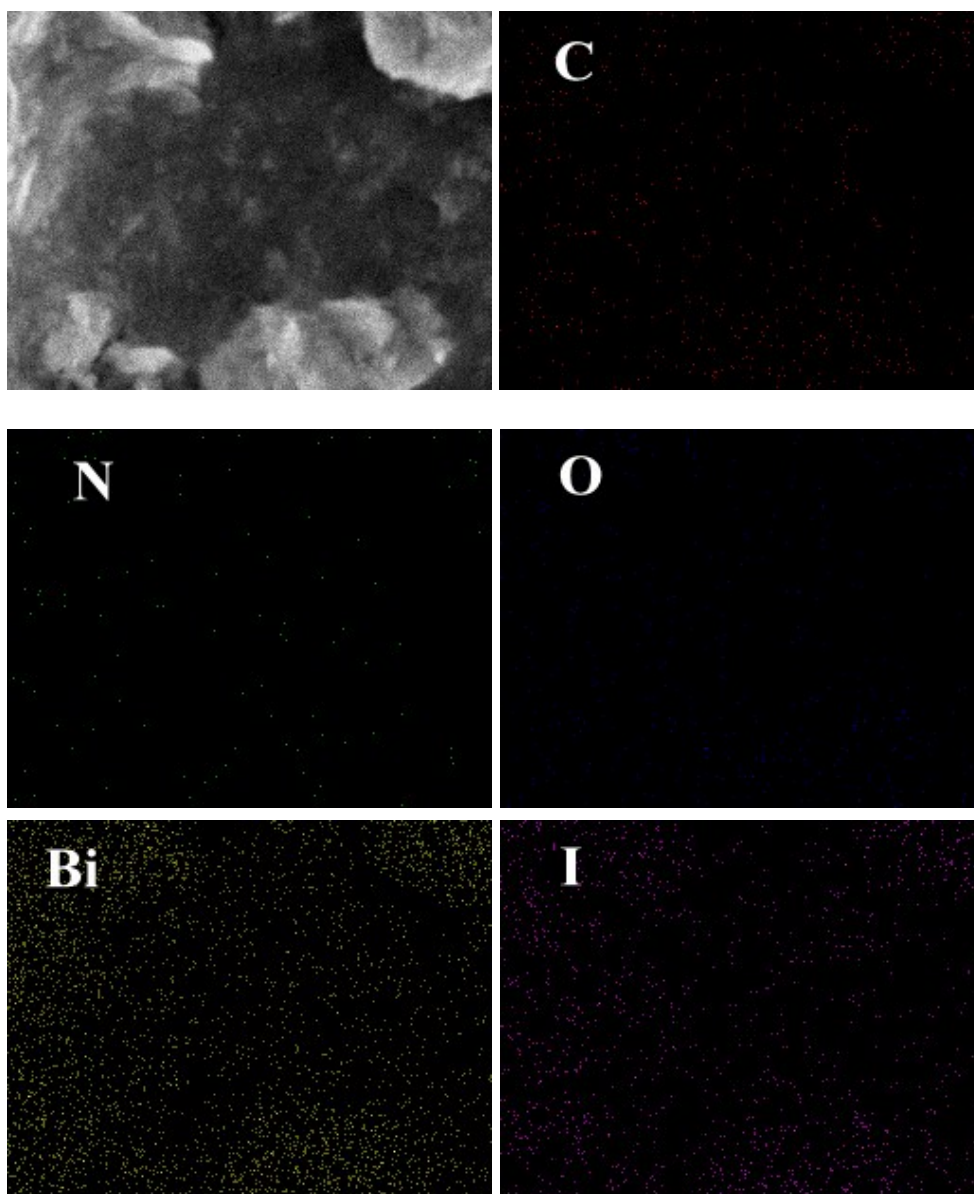
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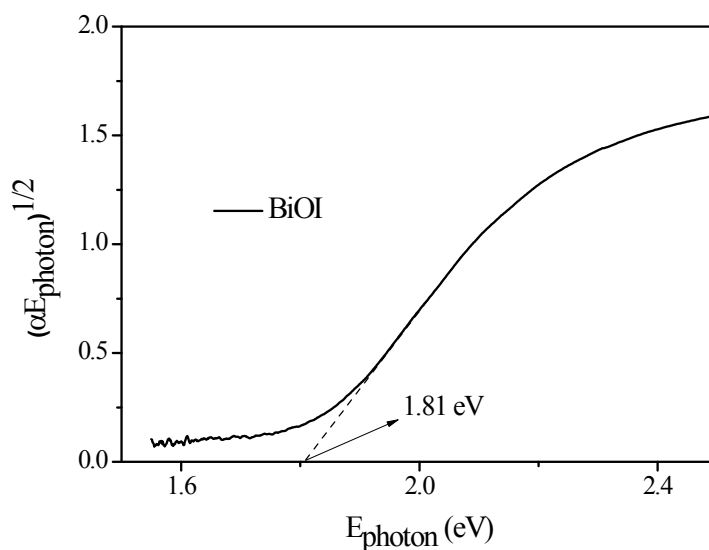
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**Figure S1.** Typical SEM image of N-CQDs/BiOI samples and corresponding elemental mapping images of C, N, O, Bi, and I.



**Figure S2.**  $(\alpha E_{\text{photon}})^{1/2}$  vs.  $E_{\text{photon}}$  curves of the as-prepared pure BiOI sample.

**Table S1** Pseudo-first-order rate constant for RhB photocatalytic oxidation under different photocatalysts

Series	Photocatalyst	The first order kinetic equation	$k$ ( $\text{min}^{-1}$ )	$R^2$
1	BiOI	$-\ln(C/C_0) = 0.0145t$	0.0145	0.9965
2	N-CQDs/BiOI-1	$-\ln(C/C_0) = 0.0283t$	0.0283	0.9958
3	N-CQDs/BiOI-2	$-\ln(C/C_0) = 0.0369t$	0.0369	0.9977
4	N-CQDs/BiOI-4	$-\ln(C/C_0) = 0.0267t$	0.0267	0.9957