

## Supplementary Information

### **Controllable Construction of Graphitic Carbon Nitride with Highly Ordered Macropores for Boosting Photodegradation**

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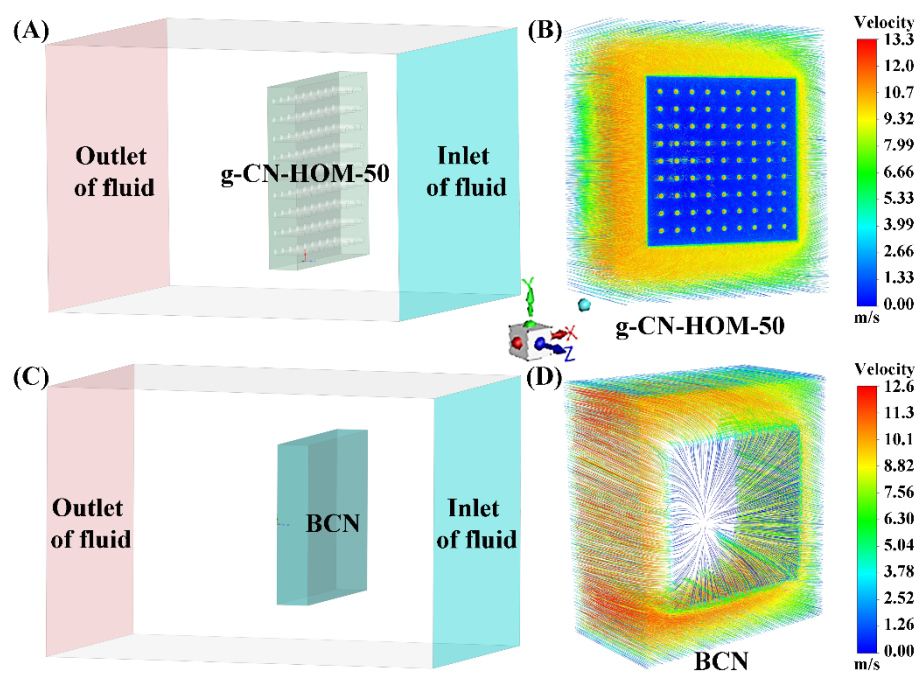
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Supplementary Information consists of 4 pages, including this page.

Contents: 3 Figures and 2 Tables.

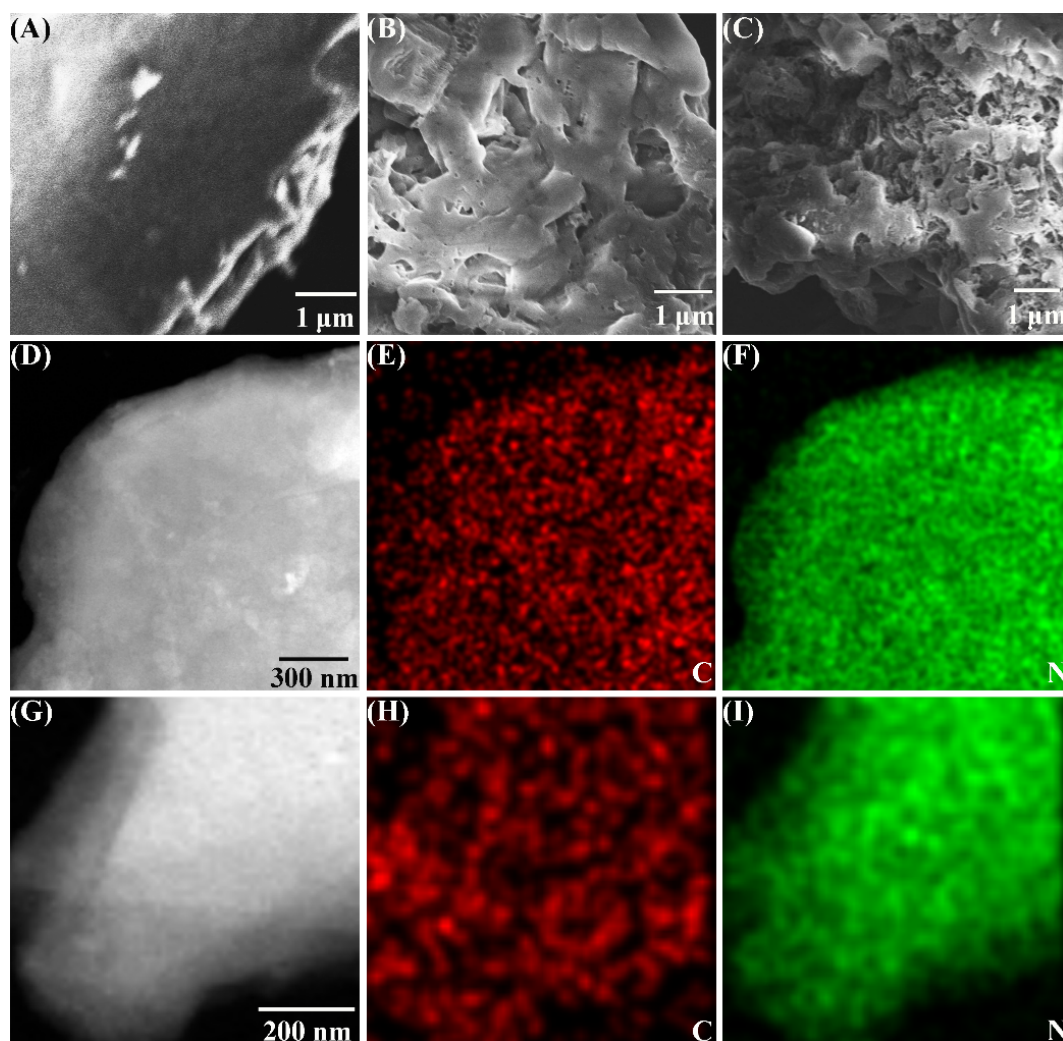
## 1. CFD simulations



**Fig. S1.** CFD model (A) and the path lines image of velocity (B) in g-CN-HOM-50.

CFD model (C) and the path lines image of velocity (D) in BCN

**2. SEM images of BCN, g-CN-HOM-25 and g-CN-HOM-75, STEM-HAADF images and the corresponding EDS mapping images of g-CN-HOM-50 and BCN**



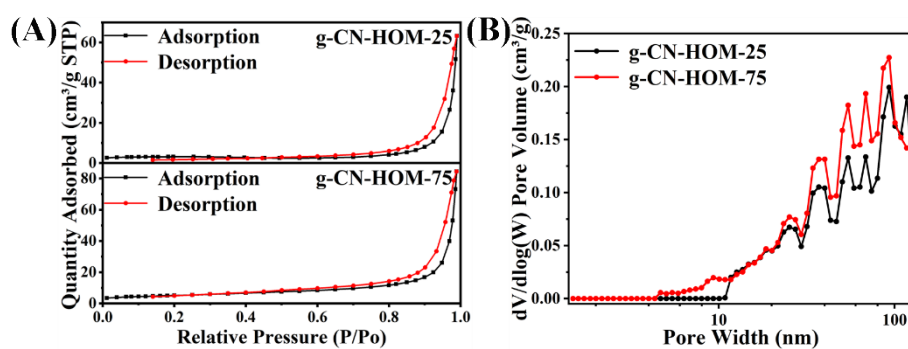
**Fig. S2.** SEM images of BCN (A), g-CN-HOM-25 (B) and g-CN-HOM-75 (C). The STEM-HAADF image (D) and the corresponding EDS mapping images (E, F) of g-CN-HOM-50. The STEM-HAADF image (G) and the corresponding EDS mapping images (H, I) of BCN.

### 3. Elemental analysis of g-CN-HOM-50 and BCN

**Table S1** Elemental analysis of g-CN-HOM-50 and BCN.

Catalysts	C Content (wt%)	N Content (wt%)	C : N
g-CN-HOM-50	33.69	54.68	3 : 4.18
BCN	34.07	56.02	3 : 4.23

### 4. N<sub>2</sub> adsorption-desorption isotherms and pore size distribution of g-CN-HOM-25 and g-CN-HOM-75



**Fig. S3.** N<sub>2</sub> adsorption-desorption isotherms (A) and pore size distribution (B) of g-CN-HOM-25 and g-CN-HOM-75.

### 5. The BET specific surface area (SSA) of catalysts

**Table S2** The BET SSA of catalysts.

Catalysts	g-CN-HOM-25	g-CN-HOM-50	g-CN-HOM-75	BCN
BET SSA (m <sup>2</sup> g <sup>-1</sup> )	10.02	20.66	18.24	8.35