

## Supplementary Information

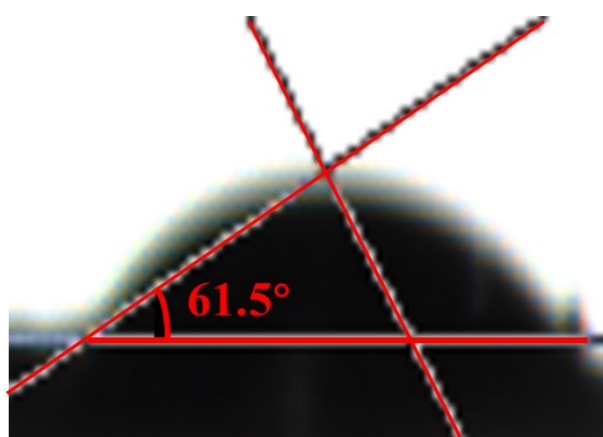
### Preparation of Fe-BN-C catalyst on the base of ZIF-8 and its performance for oxygen reduction reaction

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**Table S1** Surface areas and average pore diameters of the BN-C, Fe-BN-C-10, Fe-BN-C-20, Fe-BN-C-40 and Fe-BN-C-80.

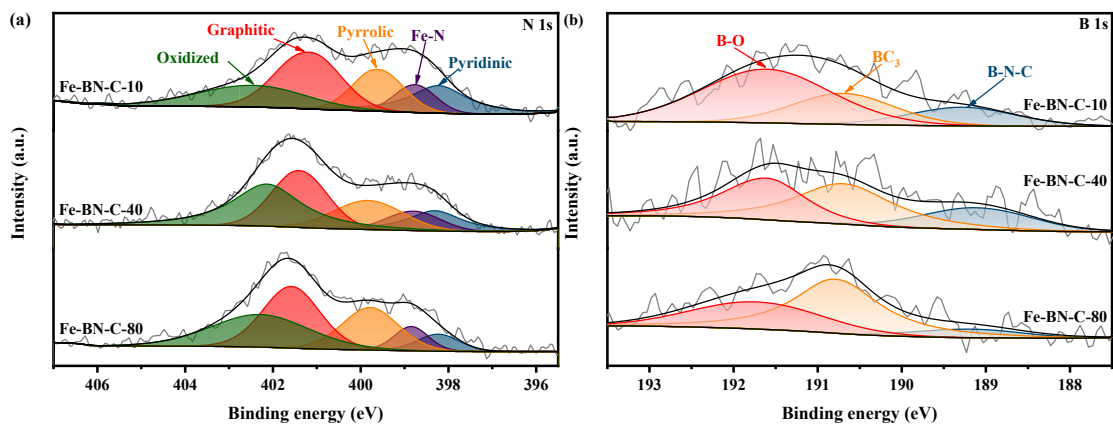
	BN-C	Fe-BN-C-10	Fe-BN-C-20	Fe-BN-C-40	Fe-BN-C-80
BET surface area ( $\text{m}^2 \text{g}^{-1}$ )	653.4	296.4	435.8	331.5	414.2
Average pore diameter (nm)	8.29	9.62	6.96	6.47	4.00



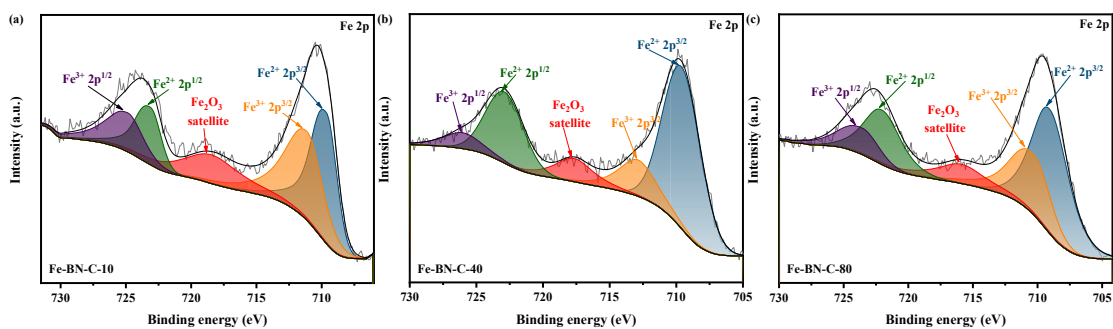
**Fig. S1** The contact angle of Fe-BN-C-20.

**Table S2** Iron content of the sample Fe-extraction obtained from ICP-MS analysis.

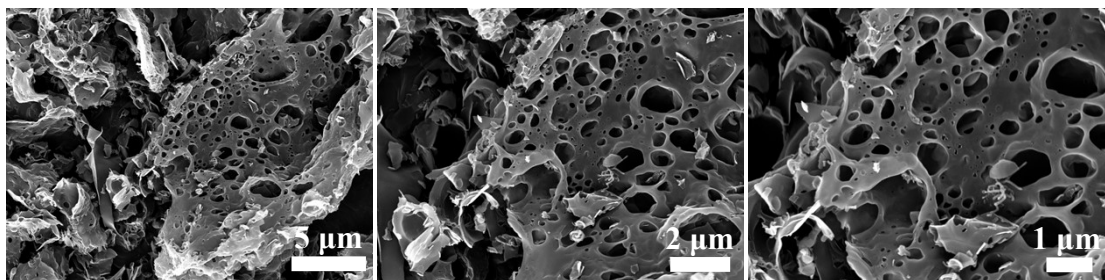
Sample	Fe wt.%
Fe-BN-C-10	0.53
Fe-BN-C-20	2.53
Fe-BN-C-40	2.44
Fe-BN-C-80	2.34



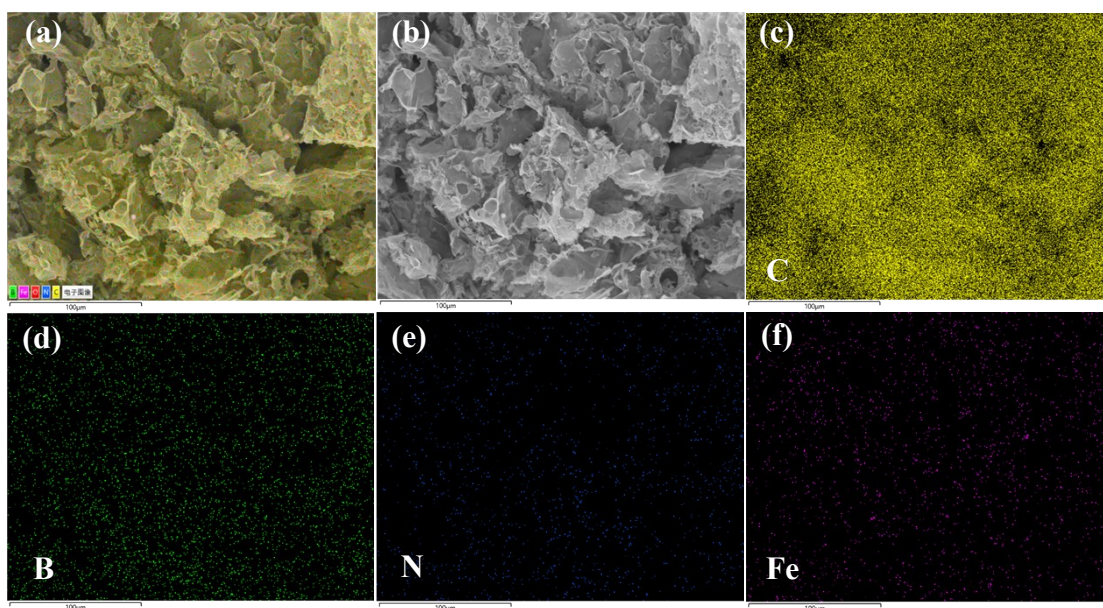
**Fig. S2** (a) N 1s XPS spectra of BN-C-10, Fe-BN-C-40 and Fe-BN-C-80. (b) B 1s XPS spectra of BN-C-10, Fe-BN-C-40 and Fe-BN-C-80.



**Fig. S3** Fe 2p XPS spectra of (a) Fe-BN-C-10, (b) Fe-BN-C-40, (c) Fe-BN-C-80.



**Fig. S4** SEM image of Fe-BN-C-20 catalyst after 36000s stability test at 0.6 V vs. RHE.



**Fig. S5** Element mapping of (c) carbon, (d) boron, (e) nitrogen and (f) iron in the Fe-BN-C-20 sample after stability test.

**Table S3** The quantitative elemental compositions of the Fe-BN-C-20 sample before and after stability test.

Sample	Fe wt.%	B wt.%	C wt.%	N wt.%	O wt.%
Before stability testing	1.99	9.30	79.08	2.01	7.63
After stability testing	1.72	6.01	81.8	1.70	8.76