Electronic Supplementary Information

Iron and nitrogen codoped ordered mesoporous carbons as non-precious metal catalysts for oxygen reduction reaction

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Table S1. Comparison of ORR performances of Fe,N co-doped carbons in recent literature

Authors	Catalyst loading (mg/cm²)	Onset potential (V vs. RHE)	n (Potentials V vs. RHE)	High Stability	Tolerance to crossover effect	Reference
Liu et al.	0.39	+ 0.94	~3.97 (+0.45 to +0.65 V)	Yes	Yes	Adv. Mater. 2013, 25, 6879–6883
Silva et al.	0.1	+ 0.94	3.78 (+0.3 to +0.7 V)	Yes	Yes	J. Am. Chem. Soc. 2013, 135, 7823
Liang et al.	0.6	+ 0.84 V	~3.95 (at +0.5 V)	Yes	Unkown	J. Am. Chem. Soc. 2013, 135, 16002
Lin et al.	0.1	+ 0.92 V	~3.96 (+0.1 to +1.1 V)	Yes	Yes	J. Am. Chem. Soc. 2014, 136, 11027
Hou et al.	0.7	0.91 V	3.08~3.52 (+0.5 to +0.7 V)	Yes	Yes	Adv. Energy Mater. 2014, 4, 1400337
Yan et al.	0.61	+0.95 V	3.0-4.0 (+0.37 to +0.77 V)	Yes	Yes	J. Mater. Chem. A, 2014, 2, 8617
Lai et al.	0.04	+ 0.874	~3.77 (+0.8 to +1.0)	Yes	Yes	ACS Appl. Mater. Interfaces 2015, 7, 18170–18178
Xi et al.	0.40	+ 0.91 V	~3.7 (+0.4 to +0.6)	Yes	Unkown	Chem. Commun., 2015, 51, 10479
Niu et al	0.08	+0.98 V	~3.95 (+0.5 to +0.8)	Yes	Yes	J. Am. Chem. Soc. 2015, 137, 5555–5562
Meng et al.	0.26	+1.027 V	~4.05 (+0.3 to 0.6 V)	Yes	Unkown	Adv. Mater. 2016, DOI: 10.1002/adma.201602490
Ferrero et al.	0.10	+ 0.94 V	~3.7 (at +0.58 V)	Yes	Yes	ACS Nano, 2016, 10, 5922–5932
Cui et al.	0.60	+ 1.025 V	~3.69(+0.2 to +0.6 V)	Yes	Yes	Adv.Funct.Mater.,2016,26, 5708–5717
This work	0.08	+0.99 V	3.5-3.82 (0 to 0.85 V)	Yes	Yes	

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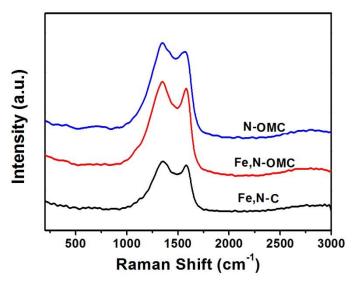


Figure S1. Raman spectra of Fe,N-C, Fe,N-OMC and N-OMC.

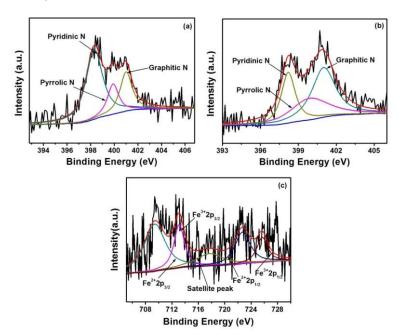


Figure S2. Peak deconvolutions of the N 1s spectra of (a) Fe,N-C and (b) N-OMC; and (c) the Fe 2p spectrum of Fe,N-C.

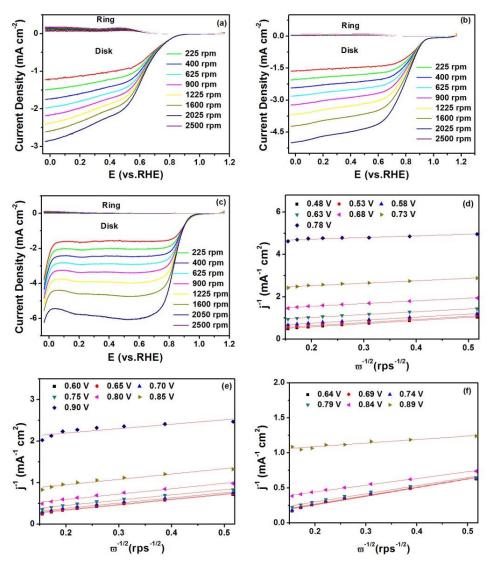


Figure S3. Polarization curves for ORR in O₂-saturated 0.1 M KOH solution on (a) Fe,N-C, (b) N-OMC and (c) Pt/C electrode at various rotation rates; and the corresponding Koutecky–Levich plots of (d) Fe,N-C, (e) N-OMC and (f) Pt/C at different electrode potentials.