

Pt/Pd decorate MOFs derived Co-N-C materials as high-performance catalysts
for oxygen reduction reaction

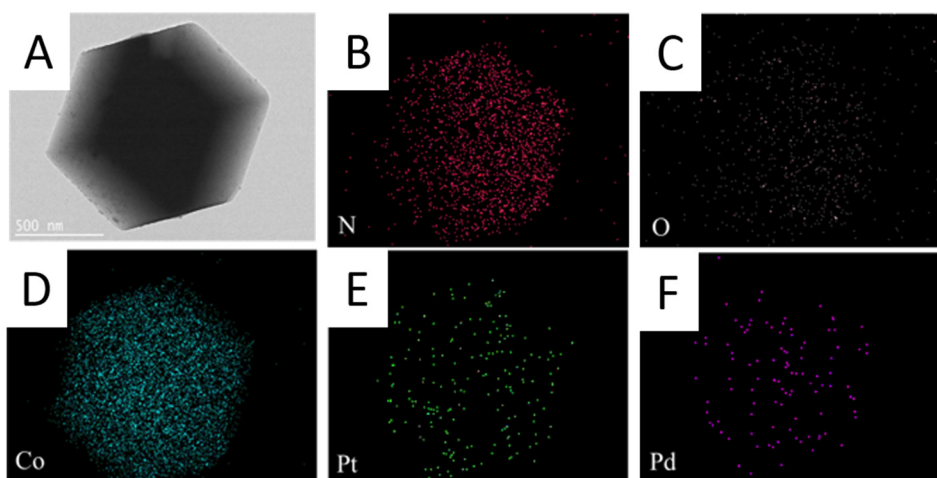


Figure S1. TEM of Pt/Pd/Co-N-C(A) and EDS mapping of N, O, Co, Pt, and Pd(B-F).

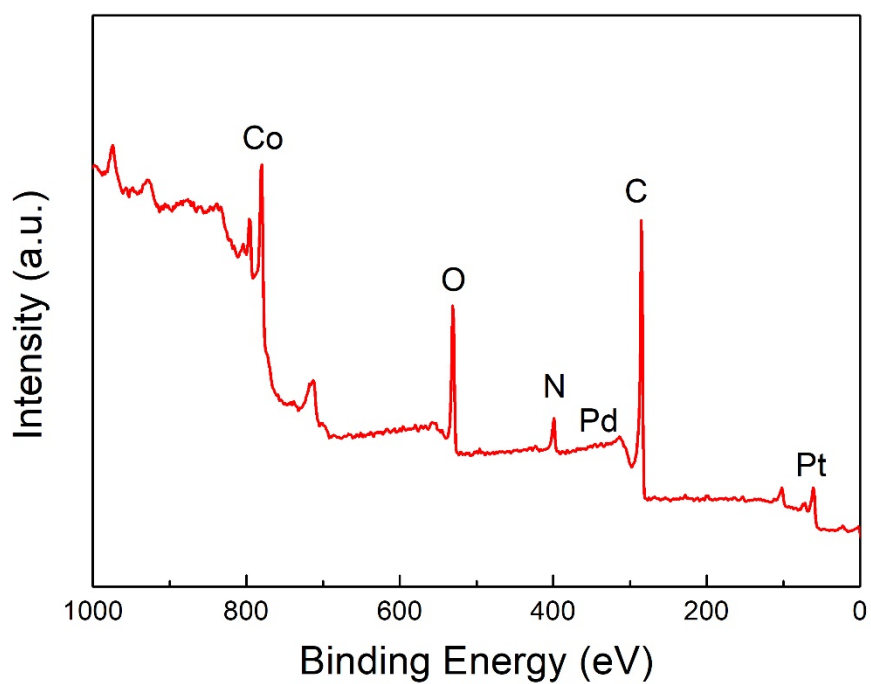


Figure S2. XPS surveys of Pt/Pd/Co-N-C

Table S1 Atomic content of Pt/Pd/Co-N-C

element	Content(at%)
C	70.55
N	6.97
O	15.58
Co	6.63

Pt	0.16
Pd	0.12

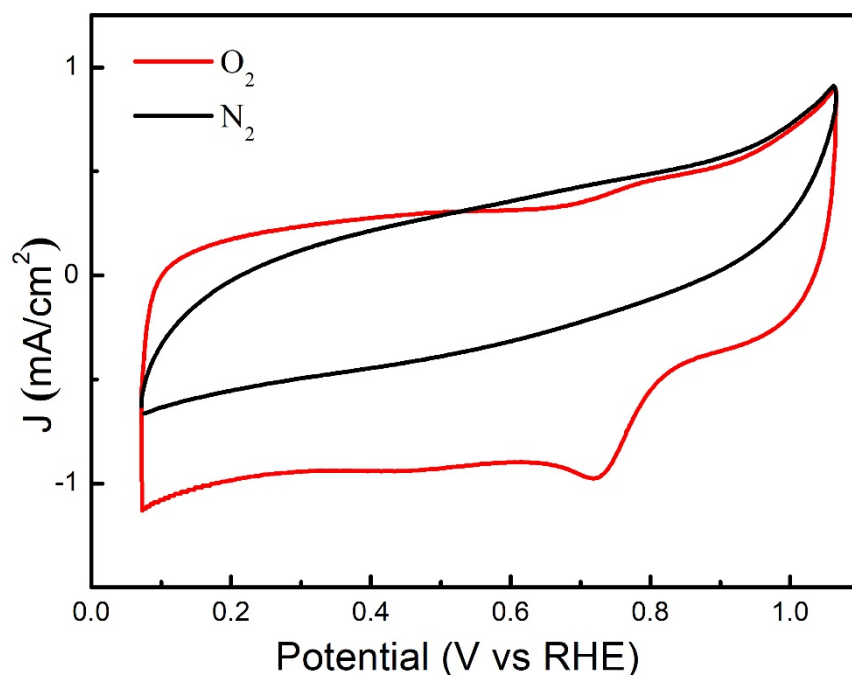


Figure S3. CVs on Pt/Pd/Co-N-C in N₂ and O₂ saturated 0.1 M KOH solution.

Table S2. ORR activity data from different catalysts

Catalyst	$E_{1/2}/V$	$E_j(\text{mA cm}^{-2})$	Tafel Slope(mV dec^{-1})	Ref.
Pd@Zn	0.82	6.07	58	[1]
Pt ₂ Pd ₁	0.889	5.9	90	[2]
Zn-Co-ZIF/GO-920	0.807	6.23	51	[3]
NGQDS ₁₄₀ -PtPd	0.87	5.66	77	[4]
Pd _{4.7} RuNPs/NrGO	0.792	6.3	Not report	[5]
Pt ₅₀ Pd ₅₀	0.92	6.6	73.2	[6]
Pd ₉ Ru ₁ /C	0.86	5.7	76.75	[7]
Co-N-C	0.82	4.4	78	This work
Pd/Co-N-C	0.81	5.4	74	This work
Pt/Co-N-C	0.81	5.9	86	This work
Pt/C	0.84	5.8	72	This work
Pt/Pd/Co-N-C	0.84	6.6	74	This work

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