

Figure S1. (a)STEM image of Fe₃N@CNT/CC, (b)Histogram of the size distribution of nanoparticles.

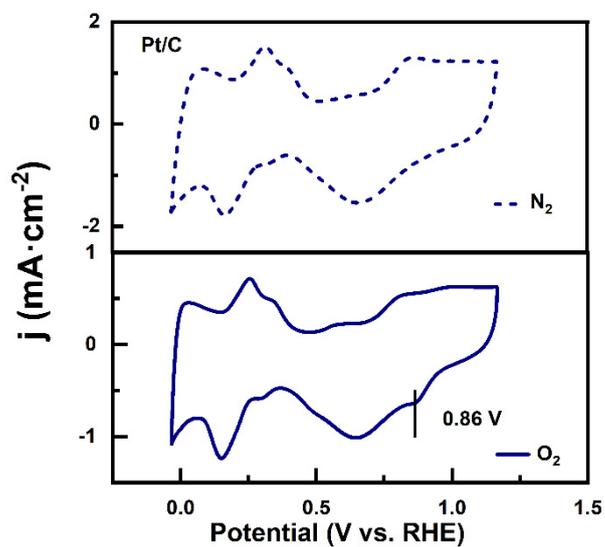


Figure S2. CV curves of the Pt/C in N₂ (dashed line) and O₂ (solid line) saturated 0.1 M KOH electrolyte with a scan rate of 10 mV·s⁻¹.

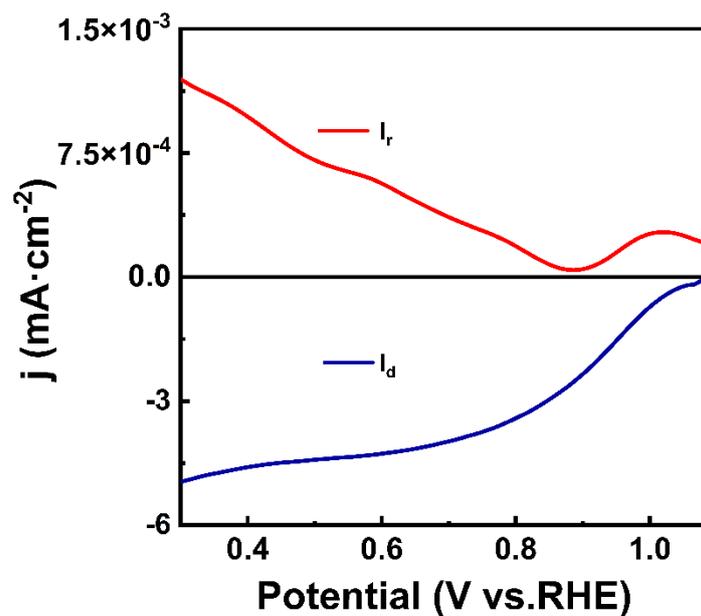


Figure S3. RRDE voltammograms of $\text{Fe}_3\text{N@CNT/CC}$ at a rotation rate of 1600 rpm

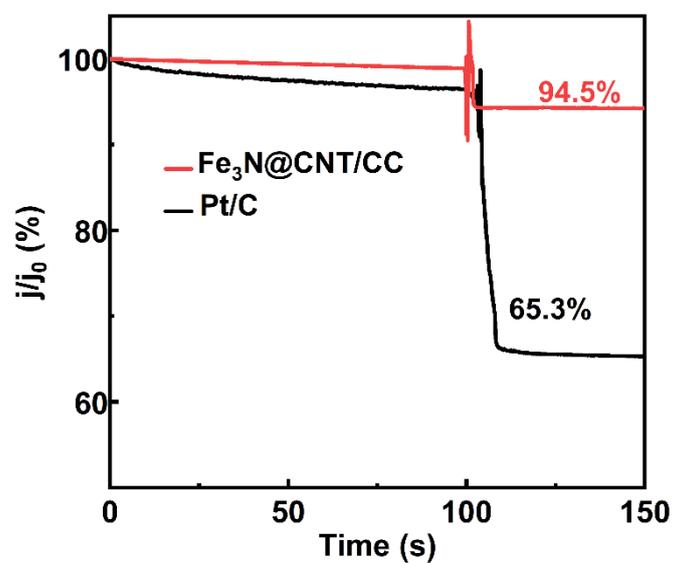


Figure S4. The chronoamperometric curves of $\text{Fe}_3\text{N@CNT/CC}$ and Pt/C acquired by injecting 1.0 M methanol at 100 s

Table S1. Proportion of element content

Element	C	N	O	Fe
Weight fraction (%)	72.23	5.067	2.182	20.096
Molar fraction(%)	82.4	5.0	1.9	4.9

Table S2. Atomic percentage of C, N, O, Fe on the surface of Fe₃N@CNT/CC

Element	C	N	O	Fe
Molar fraction(%)	47.15	17.88	23.69	11.28