

Electronic Supplementary Information

Structure engineering of robust titanium nitride as effective platinum support for oxygen reduction reaction

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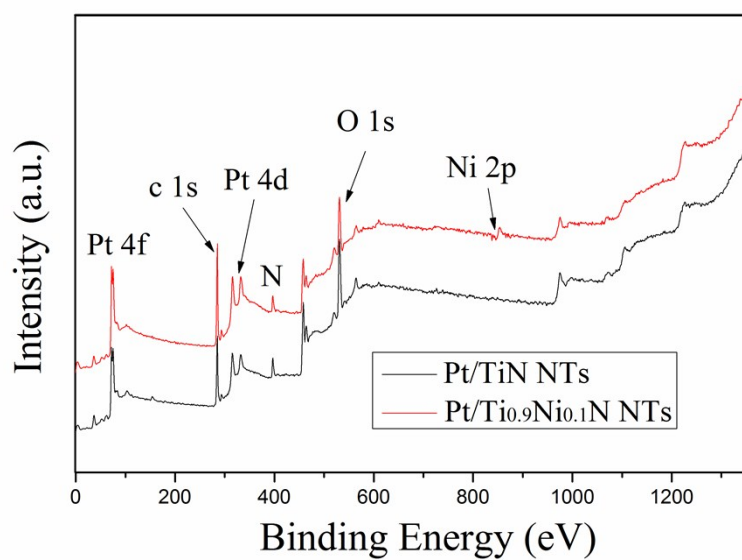


Figure S1. The XPS survey spectra of Pt/TiN and Pt/Ti_{0.9}Ni_{0.1}N NTs.

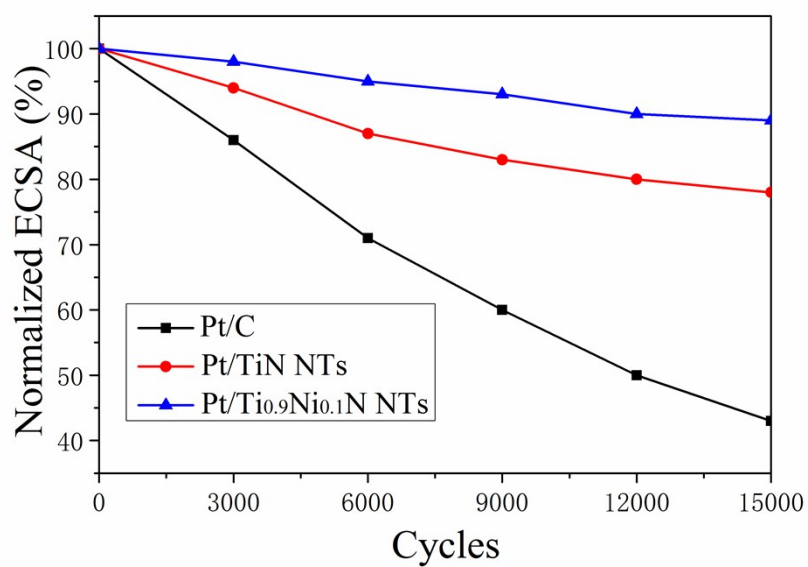


Figure S2. The ECSA evolution of the three catalysts with various cycling numbers.

Table S1. The half-wave potential, specific and mass activity values for ORR of the three catalysts

before and after ADT.

catalyst	Before the ADT			After the ADT		
	Half-wave potential (V)	MA (A mg _{Pt} ⁻¹)	SA (mA cm ⁻²)	Half-wave potential (V)	MA (A mg _{Pt} ⁻¹)	SA (mA cm ⁻²)
Pt/C	0.902	0.22	0.53	0.855	0.09	0.16
Pt/TiN	0.914	0.53	0.86	0.894	0.42	0.68
Pt/Ti _{0.9} Ni _{0.1} N	0.930	0.78	1.30	0.921	0.71	1.18