Supporting Information

Improved Oxygen Reduction Reaction Catalyzed by Pt/Clay/Nafion Nanocomposite for PEM Fuel Cells

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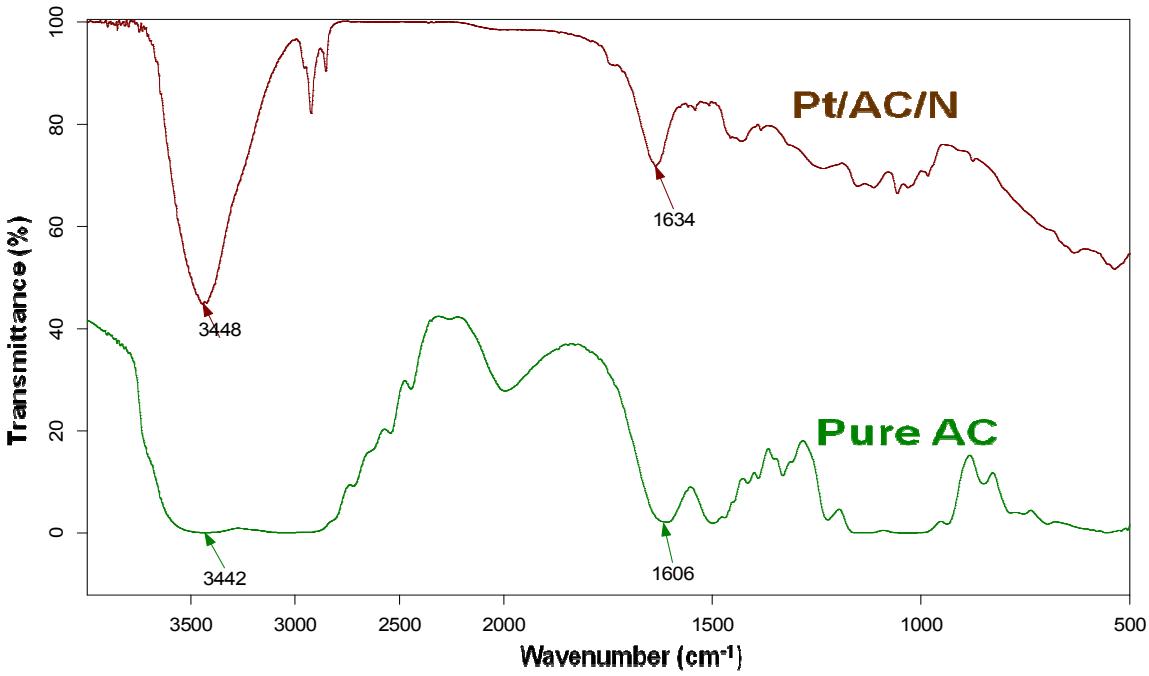
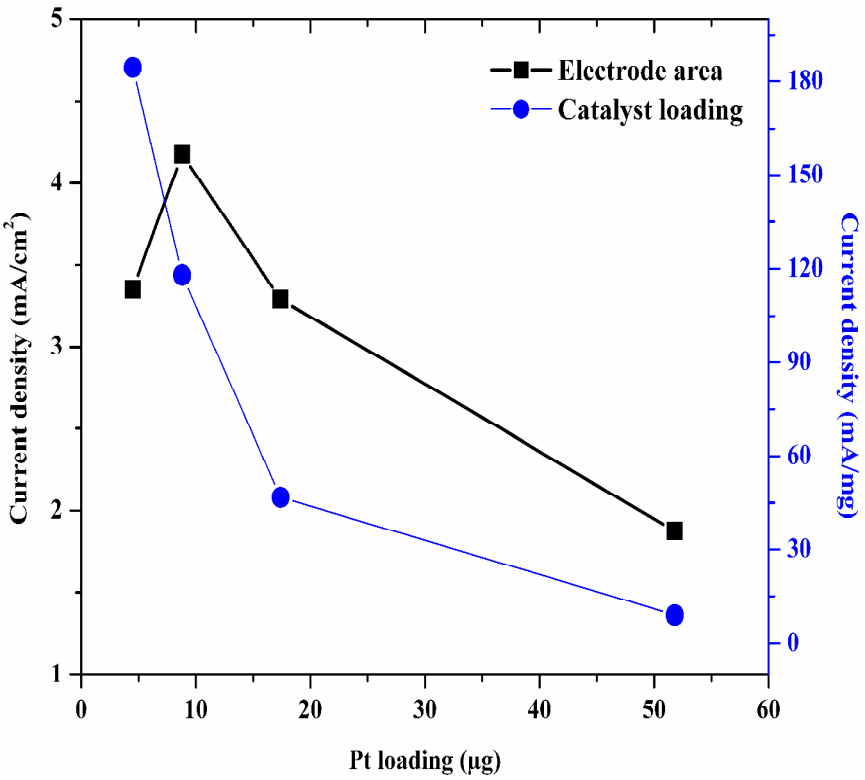
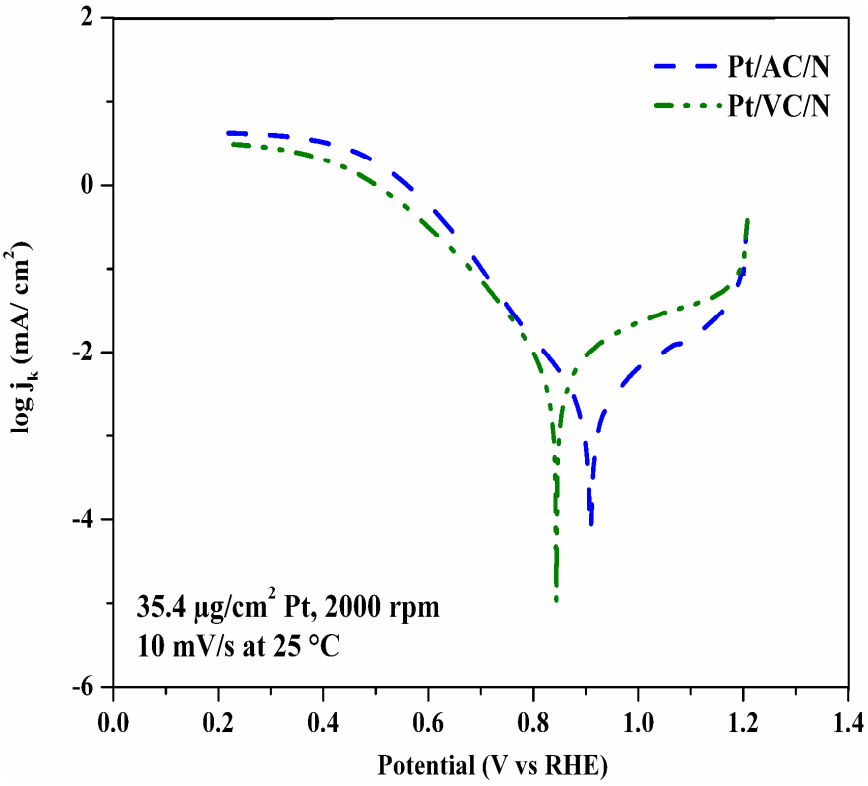


SI-1: ATR-FTIR spectra of pure AC and Pt/AC/N nanocomposite film.



SI-2: Comparison plots of limiting current density calculated by electrode surface area and Pt mass loading for Pt/AC/N in O_2 saturated 0.5 M H_2SO_4.



SI-3: Tafel plots of 6 wt % AC and VC supported Pt NP over Nafion in O_2 saturated 0.5 M H_2SO_4.

Table S1. Comparison of ECSA and limiting current density values for different Pt catalyst systems for ORR in fuel cells from literature sources.

Ref.No[a].	System	ECSA (m^2/g_{Pt})	Limiting current density (mA/cm^2)
1	Poly(amidoamine) dendrimers stabilized Pt NP	14.8	2.0
2	Star like Pt Nano wire/Carbon	22.1	5.0
3	60 wt % Pt/Graphene Nano Sheets	42 .0	5.3
4	4 nm-Pt/ Carbon	47 .0	7.0
5	Pt/Carbon (20 wt %, Johnson Matthey)	54.0	2.8
6	Pt/Carbon (30 wt %, as prepared)	57.4	4.0
7	Pt-Indium tin oxide/Graphene	67.0	5.6
8	Pt/Carbon (20 wt %, E-TEK)	83.5	5.5
9	Pt-Functionalized Graphene Sheets	108 .0	7.1

[a]References

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