

Supplementary materials

Figure S1. SEM images of (a) PAN/ Ac. carbon and (b) PAN/SiO₂ polymer gel electrolyte dried films.

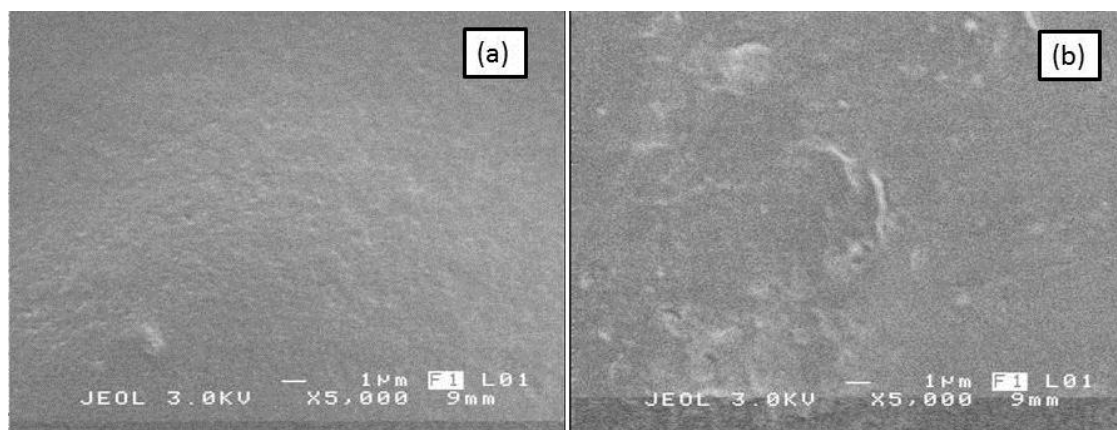


Figure S2. CV curve only for gel electrolyte with the configuration of Pt/Gel electrolyte /Pt.

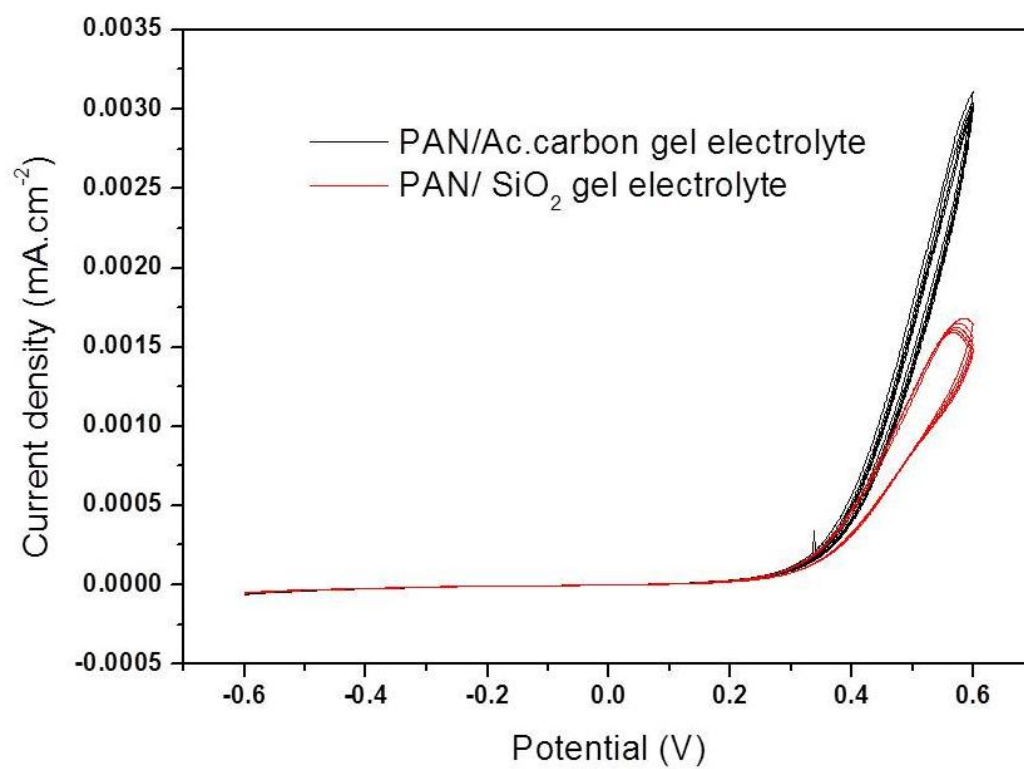


Figure S3. Nyquist plots of PAN/ Ac.carbon and PAN/SiO₂ polymer gel electrolytes.

Inset plot shows electrolyte to electrode interface contact resistance.

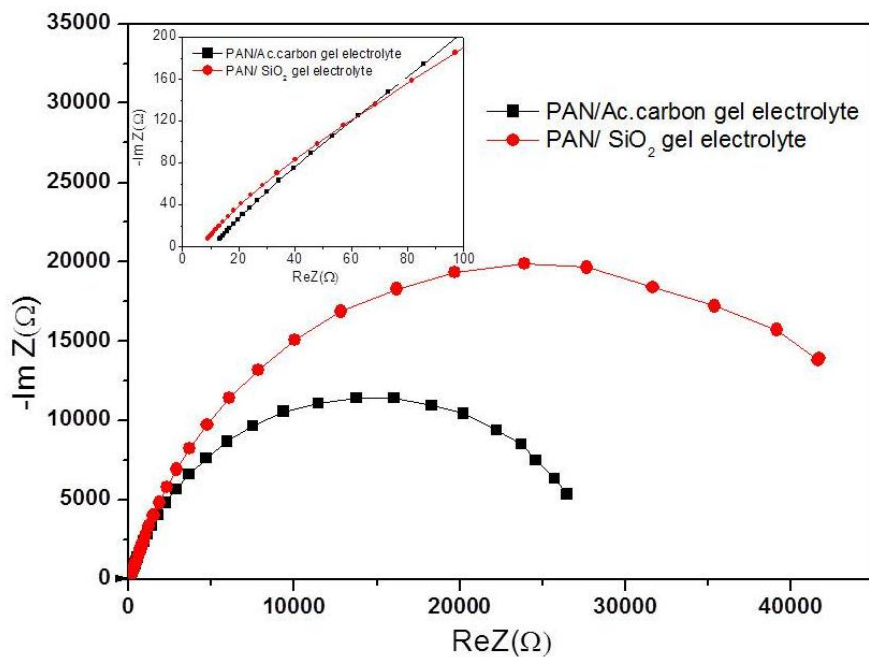


Figure S4. Determination of electronic current for PAN/ Ac.carbon and PAN/SiO₂ polymer gel electrolytes by Wagner's polarisation technique.

