Electronic Supplementary Information

Influence of current collector electrode on the capacitive performance of

electrodeposited PANI: insight gained from frequency and time domain

analysis

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Image analysis by ImageJ software



SI Figure S1: Calculation of approximate porosity for the Pt/PANI electrode obtained by electropolymerization.

Grey scale: 8 bit; Total Pixels: 262144; Black Pixels: 318583; White Pixels: 69513

Pixel Area = 0.0112×0.0112 sq.µm; Field of View Area = 32.88 sq.µm

White area (approximate area unoccupied) = 8.71 sq.µm; % porosity = $\sim 26.5\%$



SI Figure S2: Calculation of approximate porosity for the F:SnO₂/PANI electrode obtained by electropolymerization.

Grey scale: 8 bit; Total Pixels: 262144; Black Pixels: 379159; White Pixels: 8937

Pixel Area = 0.0123×0.0123 sq.µm; Field of View Area = 39.65 sq.µm

White area (approximate area unoccupied) = 1.35 sq.µm; % porosity = $\sim 3.4\%$



SI Figure S3: Anodic charge density for PANI deposition as a function of number of cycles. Inset shows the different rate of PANI deposition at lower number of sweep cycles.