

Supplementary Information

Cardo polybenzimidazole (PBI-O-PhT) based membrane reinforced with *m*-polybenzimidazole electrospun nanofiber mat for HT-PEM fuel cell applications

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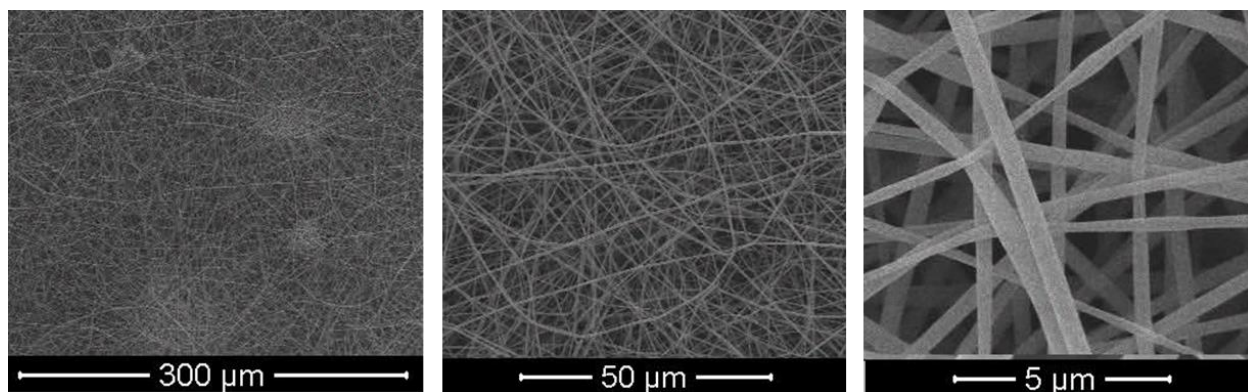


Figure S1. SEM of *m*-PBI electrospun nanofibers on aluminum foil.

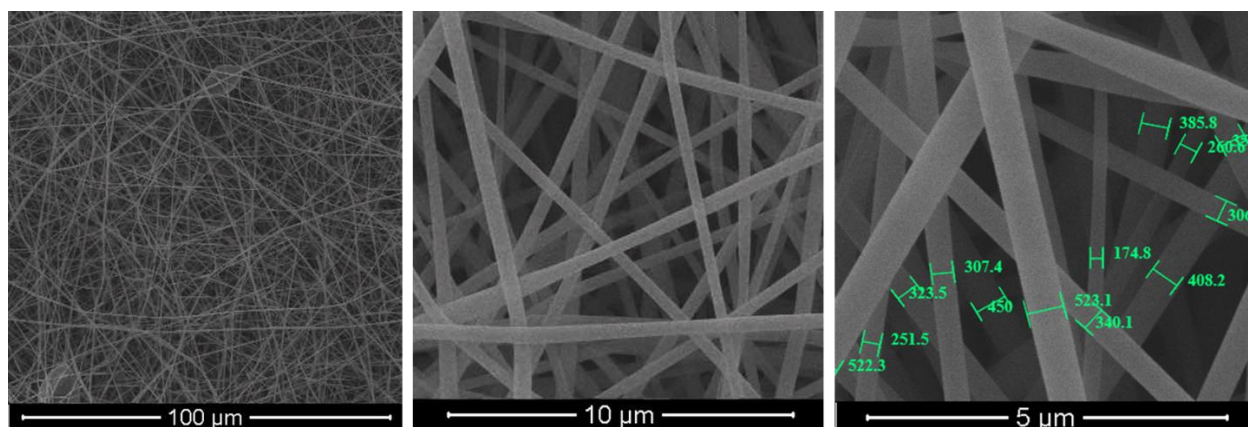


Figure S2. SEM of stabilized *m*-PBI electrospun nanofibers on aluminum foil.

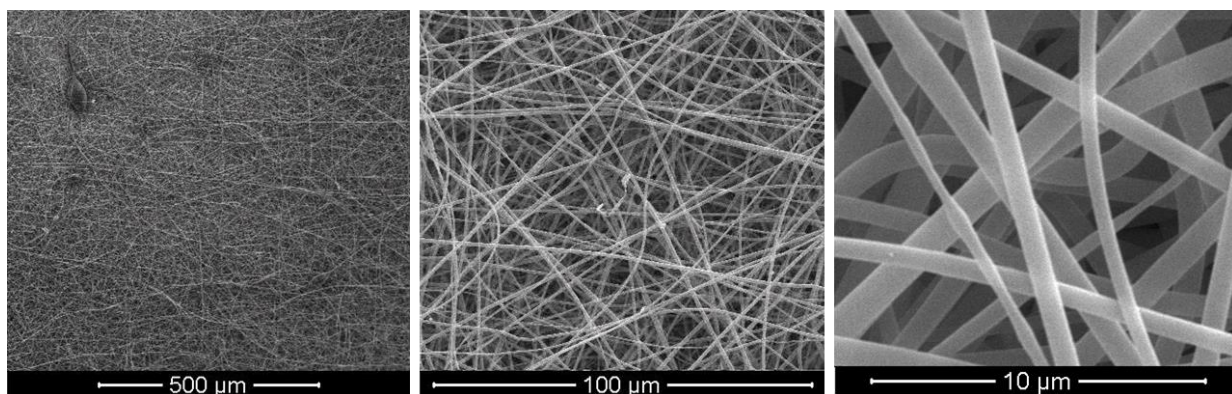


Figure S3. SEM of *m*-PBI electrospun nanofibers on siliconized paper.



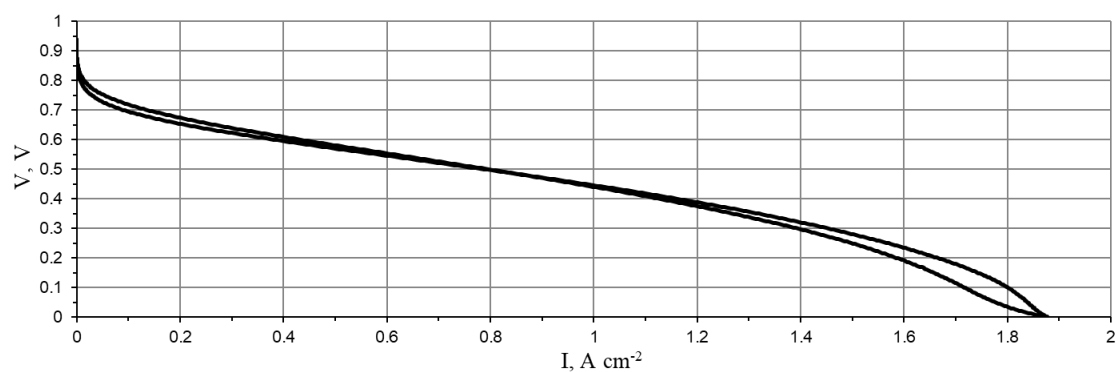
Figure S4. A photo of stabilized *m*-PBI electrospun nanofibers on aluminum foil.



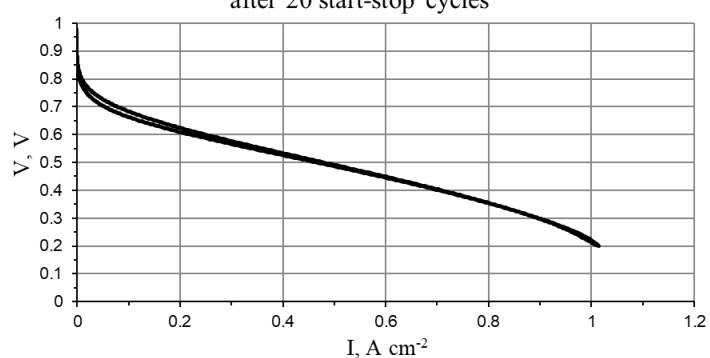
Figure S5. The composite reinforced membrane after crosslinking on aluminum foil.

Polarization curves

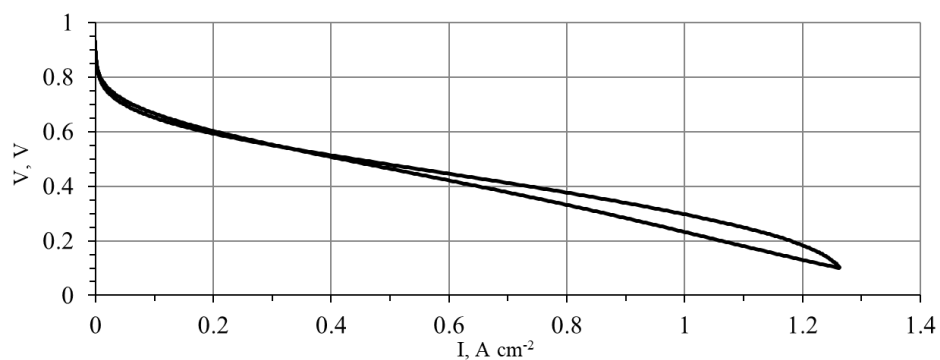
polarization curves, 180 °C, cathode - commercial Celtec®P1000 cathode
initial



after 20 start-stop cycles



polarization curves, 180 °C, CNF cathode
initial



After 20 start-stop cycles

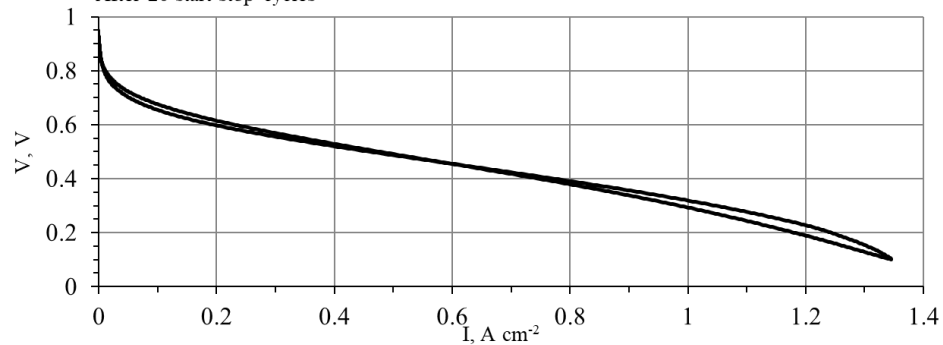


Figure S6. Polarization curves.