

Supporting Information

Morphological Differences in Short Side Chain and Long Side Chain Perfluorosulfonic Acid Proton Exchange Membranes at Low and High Water Contents

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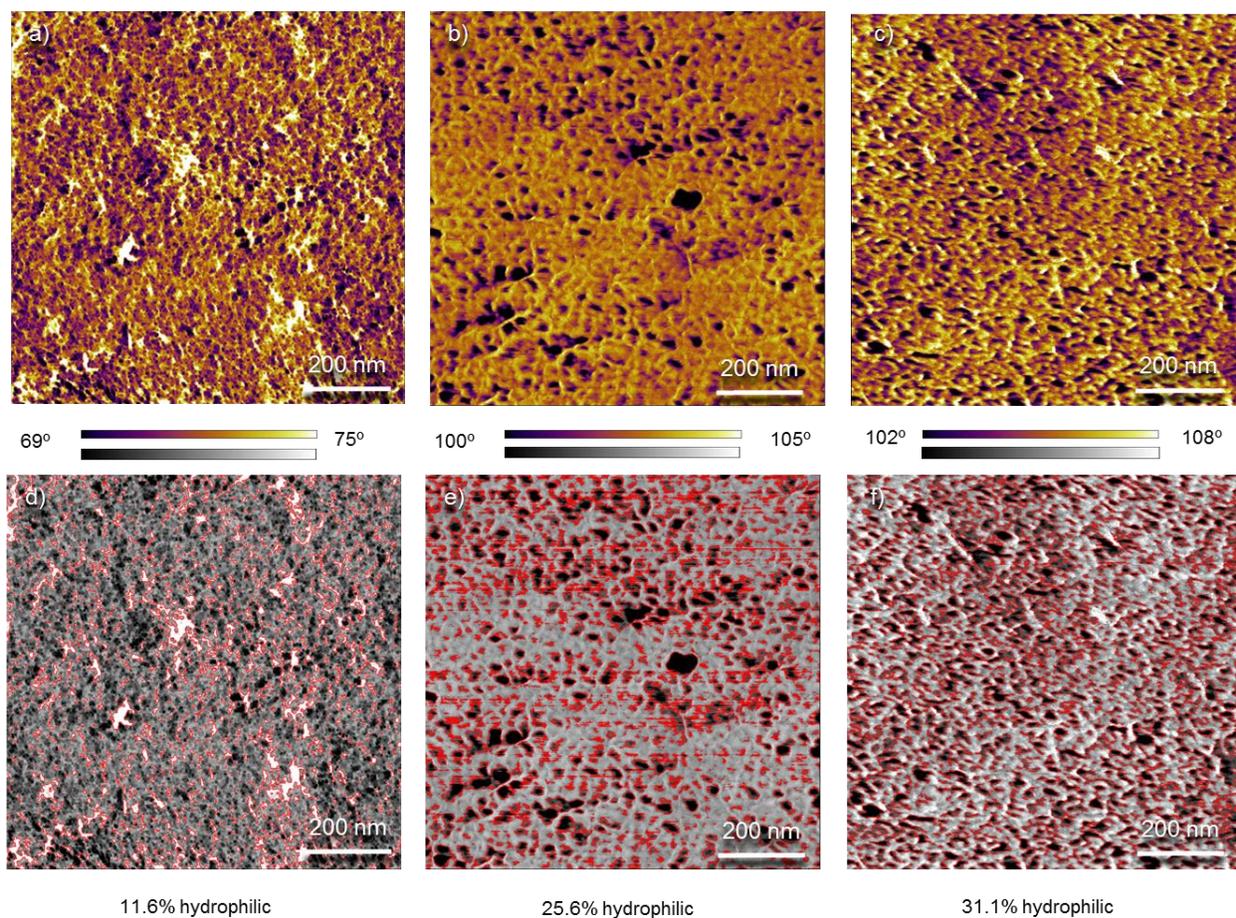


Figure S1: Phase Images (a-c) and corresponding masked phase images (d-f) of Hyflon Ion E87-05 used to determine hydrophilic surface area. Images were acquired under (a,d) dry nitrogen (3% RH), (b,e) ambient conditions (60% RH) and (c, f) under humidified nitrogen (95% RH).

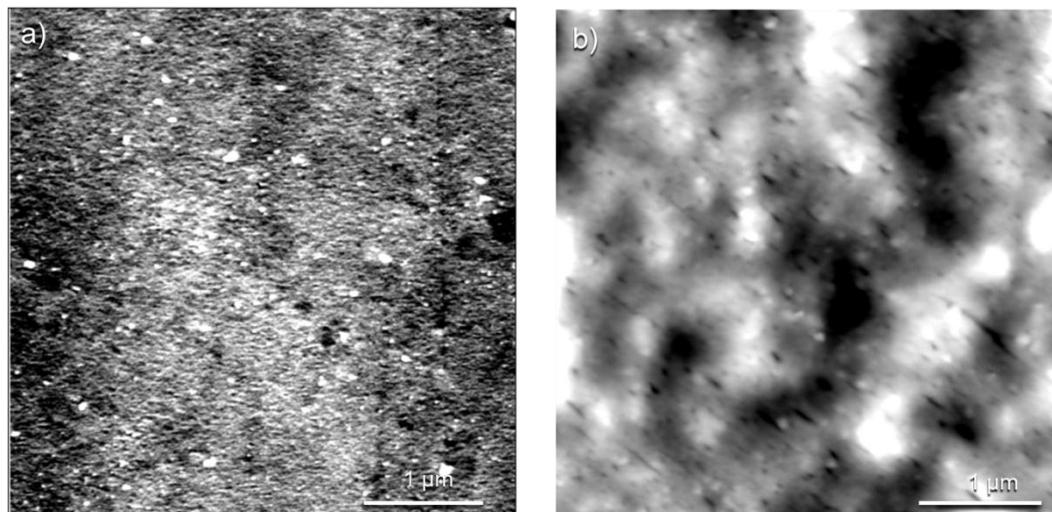


Figure S2: Topographic images of non-pretreated (a) Nafion 212 and (b) Hyflon E87-05 imaged under DI water.

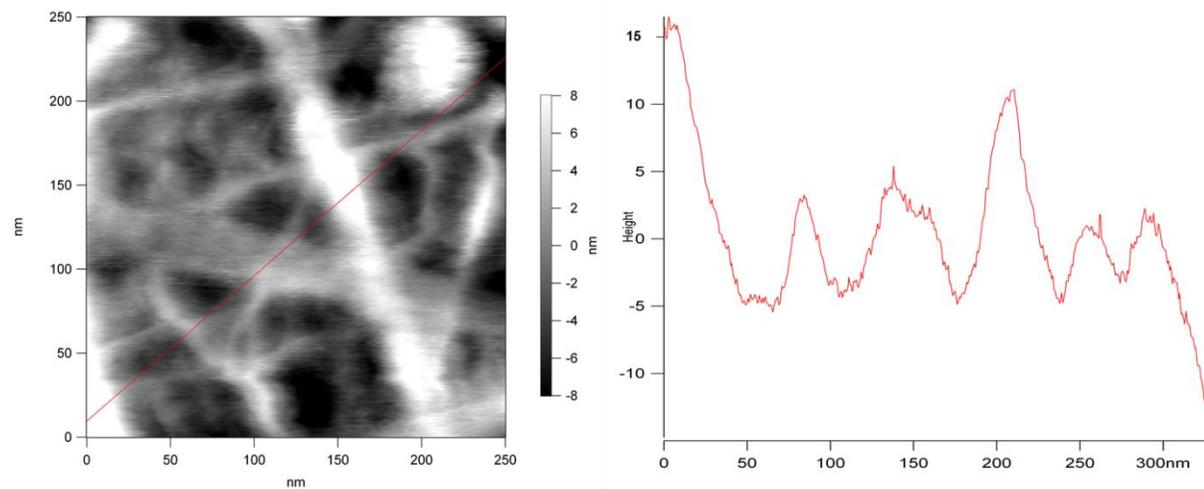


Figure S3: Small scale topographic image of Nafion 212 imaged under DI water with corresponding line profile, showing dimensions of worm-like features.

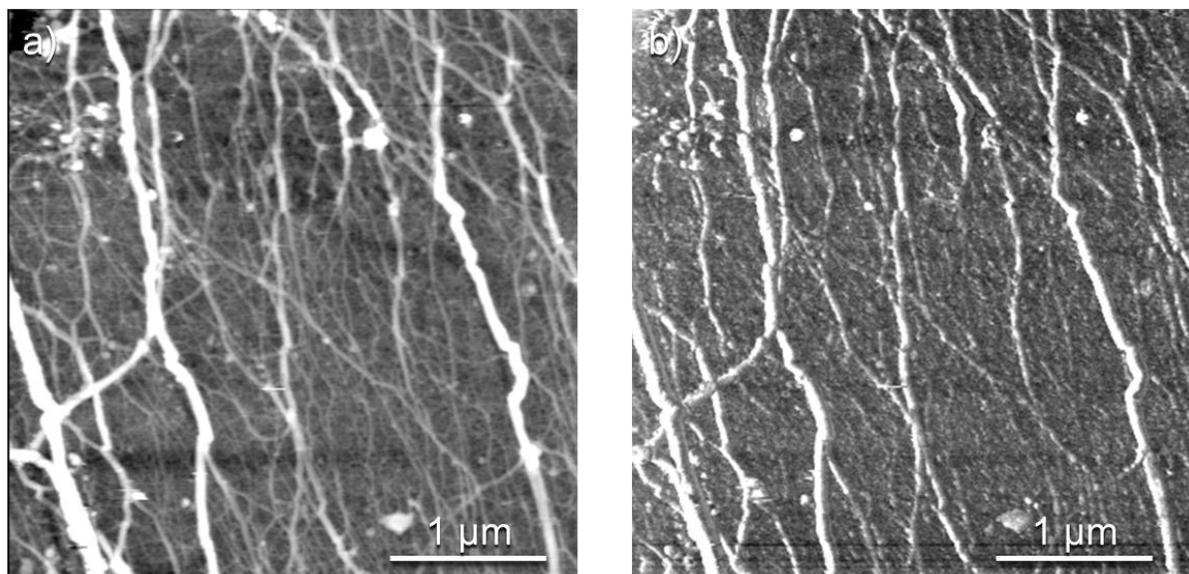


Figure S4: (a) Topography and (b) phase images of Nafion 212 under DI water showing topographic influence on phase contrast.

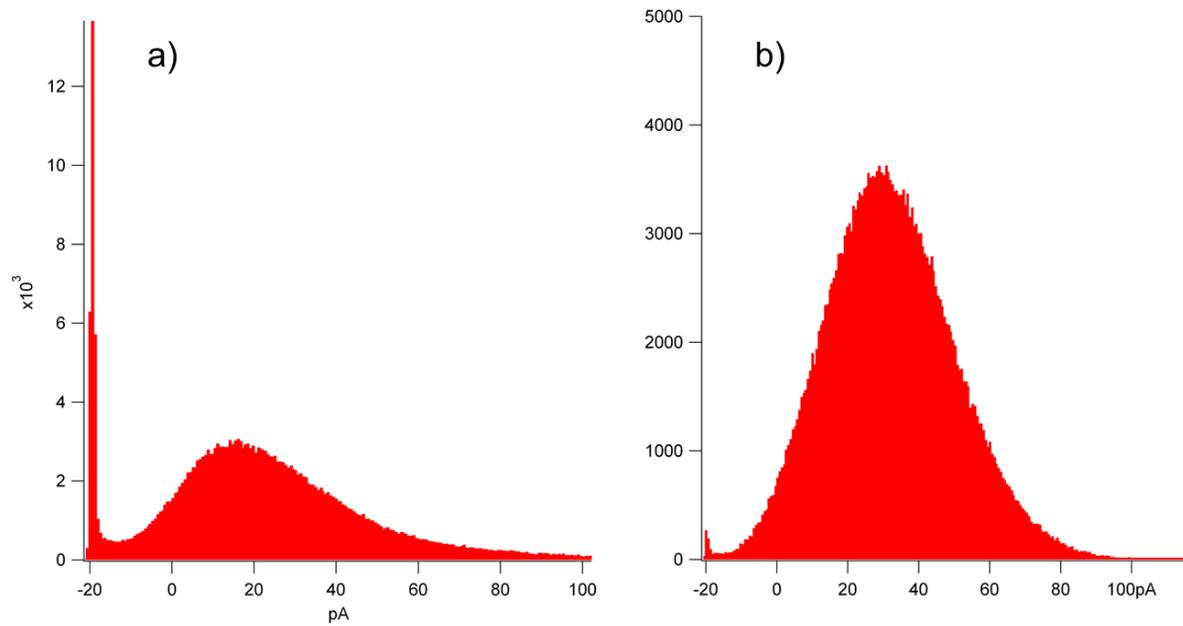


Figure S5: Current Distributions from Figure 6 images. (a) Nafion 212 and (b) Hyflon E87-05.