Supporting Information

1D Materials from Ionic Self-Assembly in Mixtures of Chromonic Liquid Crystal Mesogens

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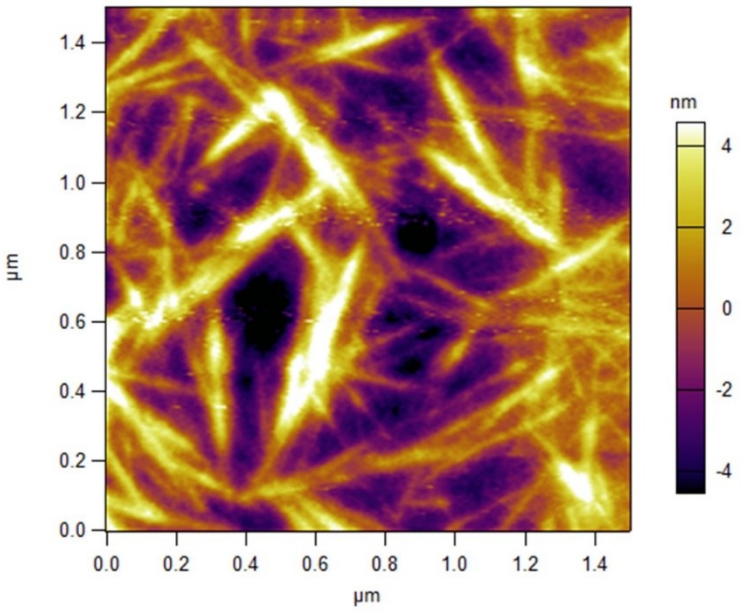

Figure S1: AFM image of porphyrin nanofibers

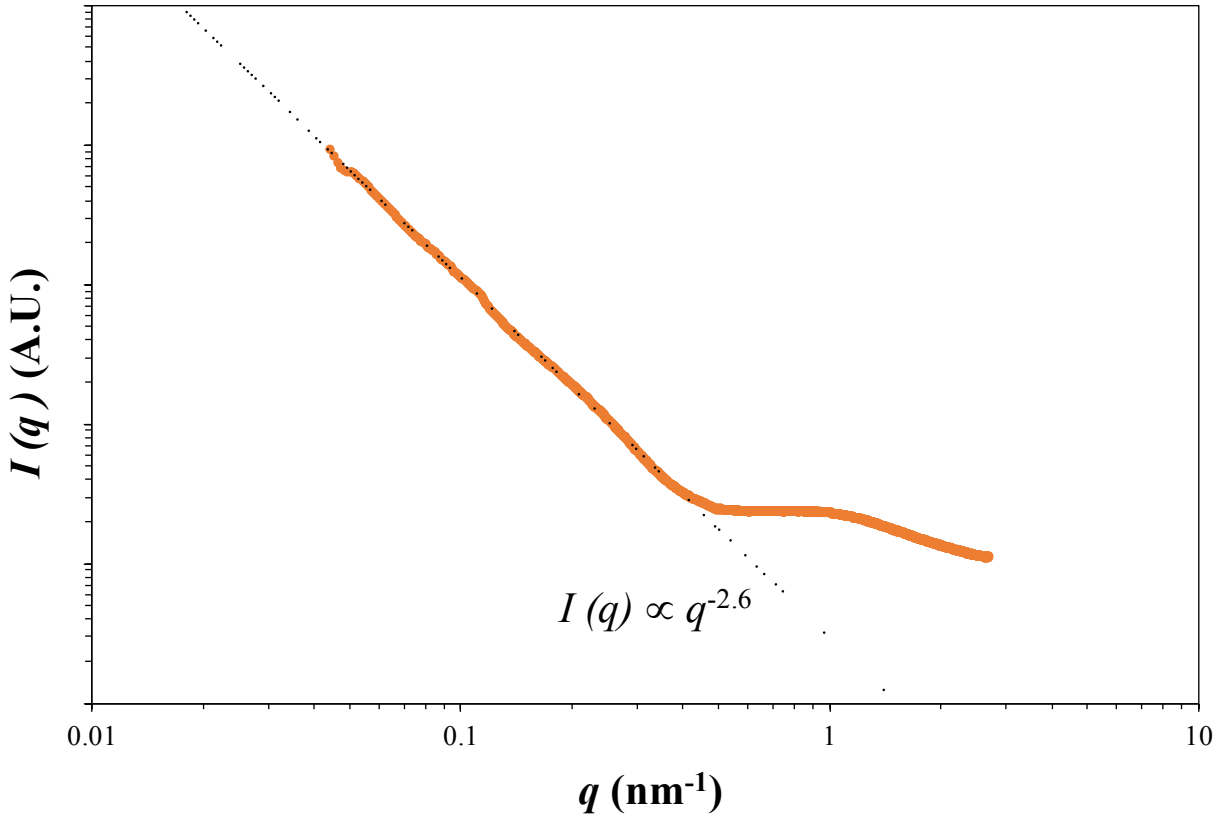

Figure S2: SAXS data of an aqueous dispersion of TMPyP–TCPPNa fibers

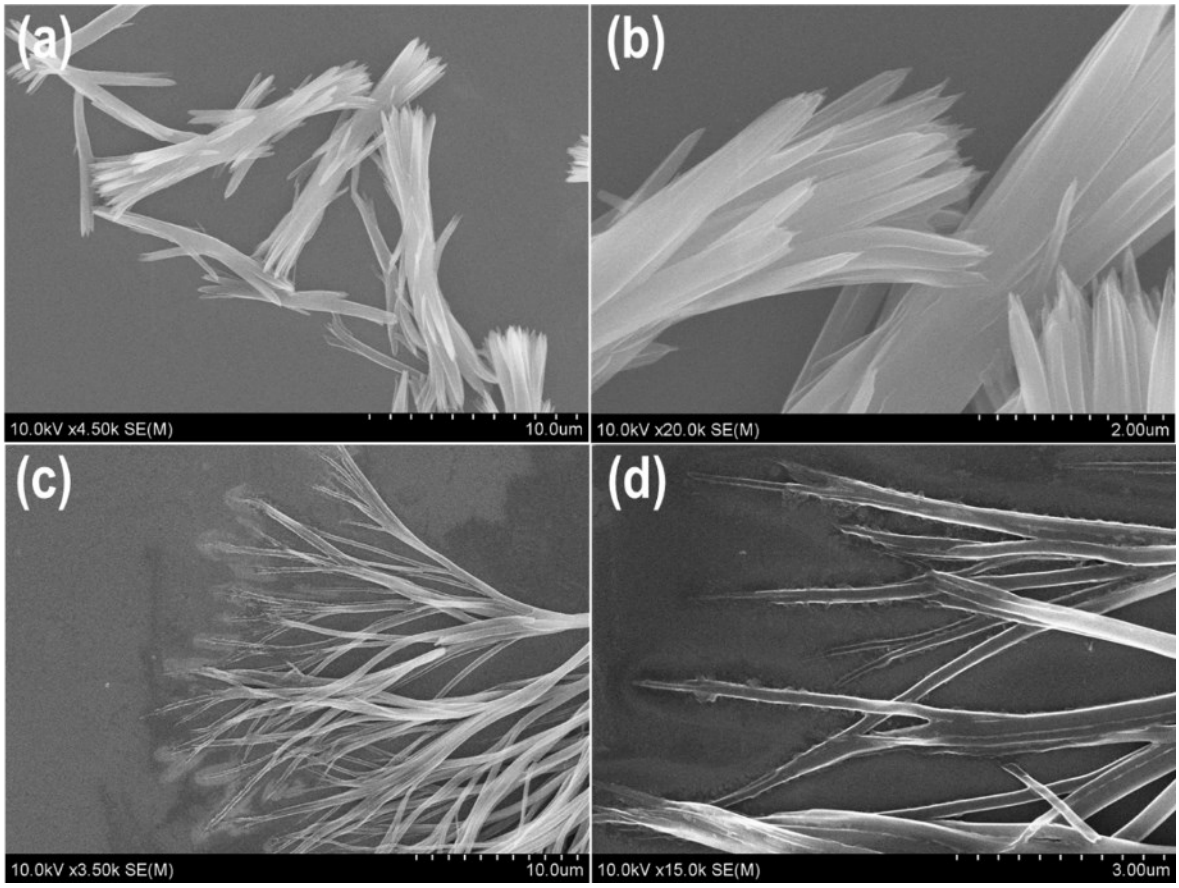

Figure S3: SEM images of TMPyP-TCPPNa fibers formed at different concentrations of the precursor porphyrin solutions. (a-b) 10^{-4} M and (c-d) 10^{-5} M.

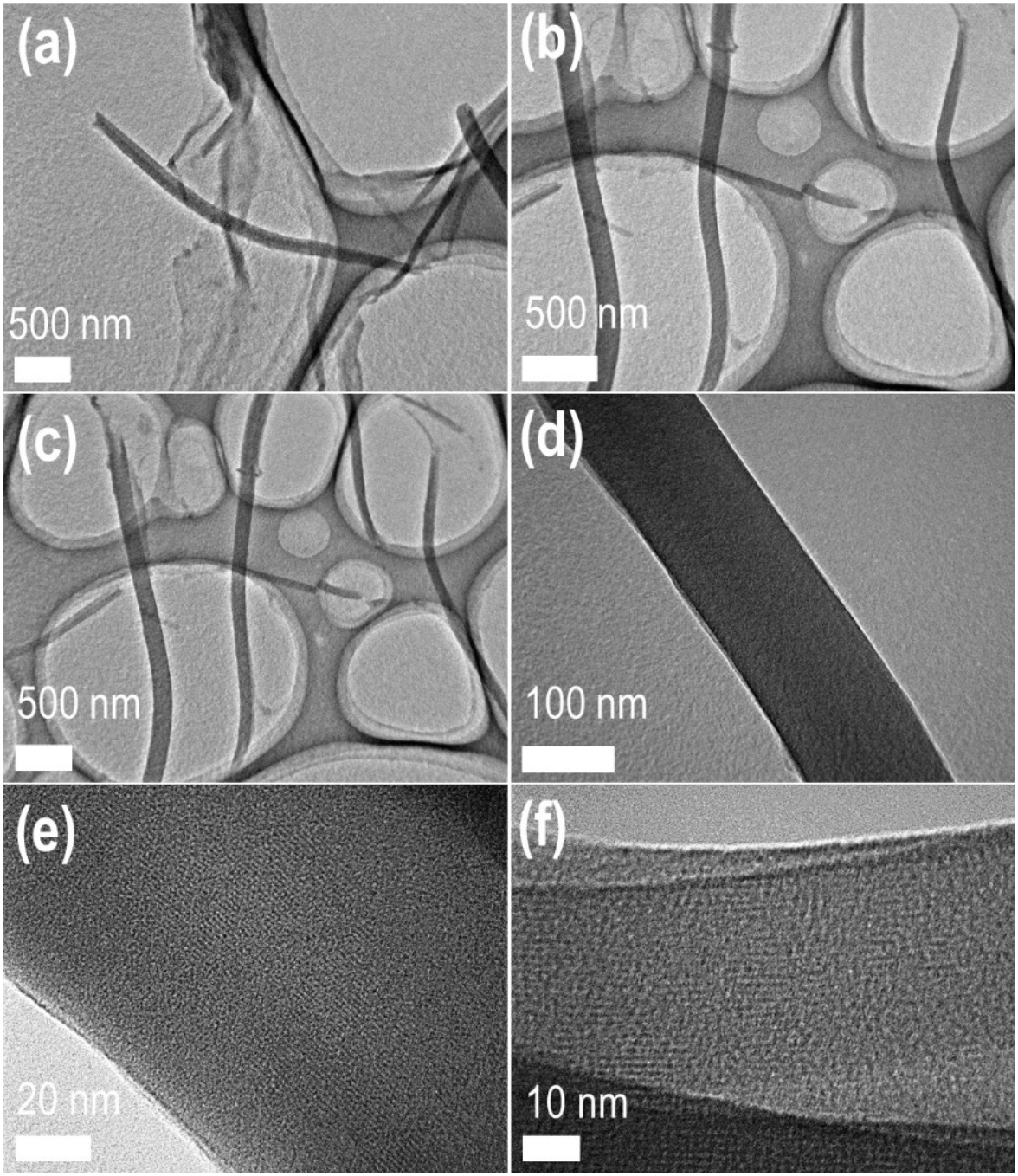

Figure S4: SEM images of TMPyP-TCPPNa fibers formed at different concentrations of the precursor porphyrin solutions. (a-b) 10^{-4} M and (c-d) 10^{-5} M.

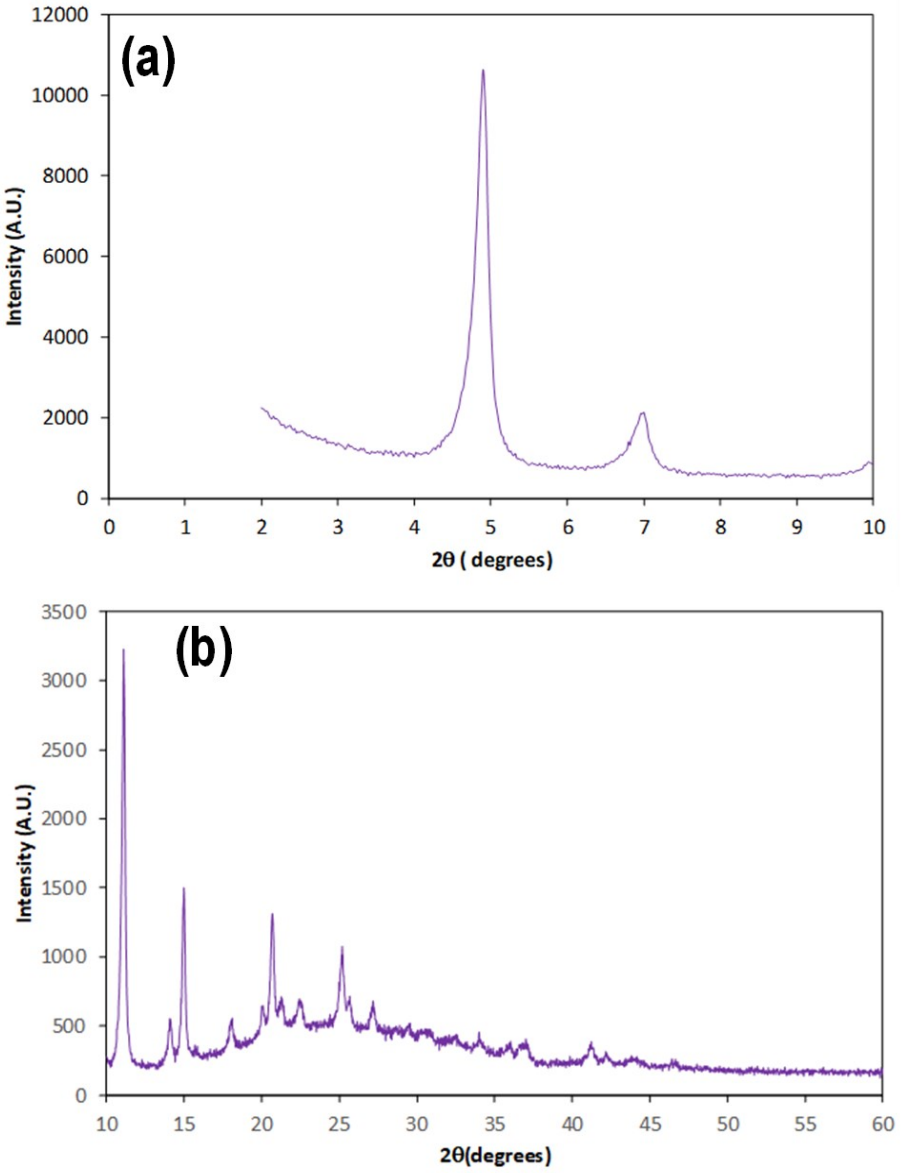

Figure S5: XRD patterns collected in two different 2θ ranges for TMPyP-TCPPNa fibers. Indexing is explained in the main text of the article.

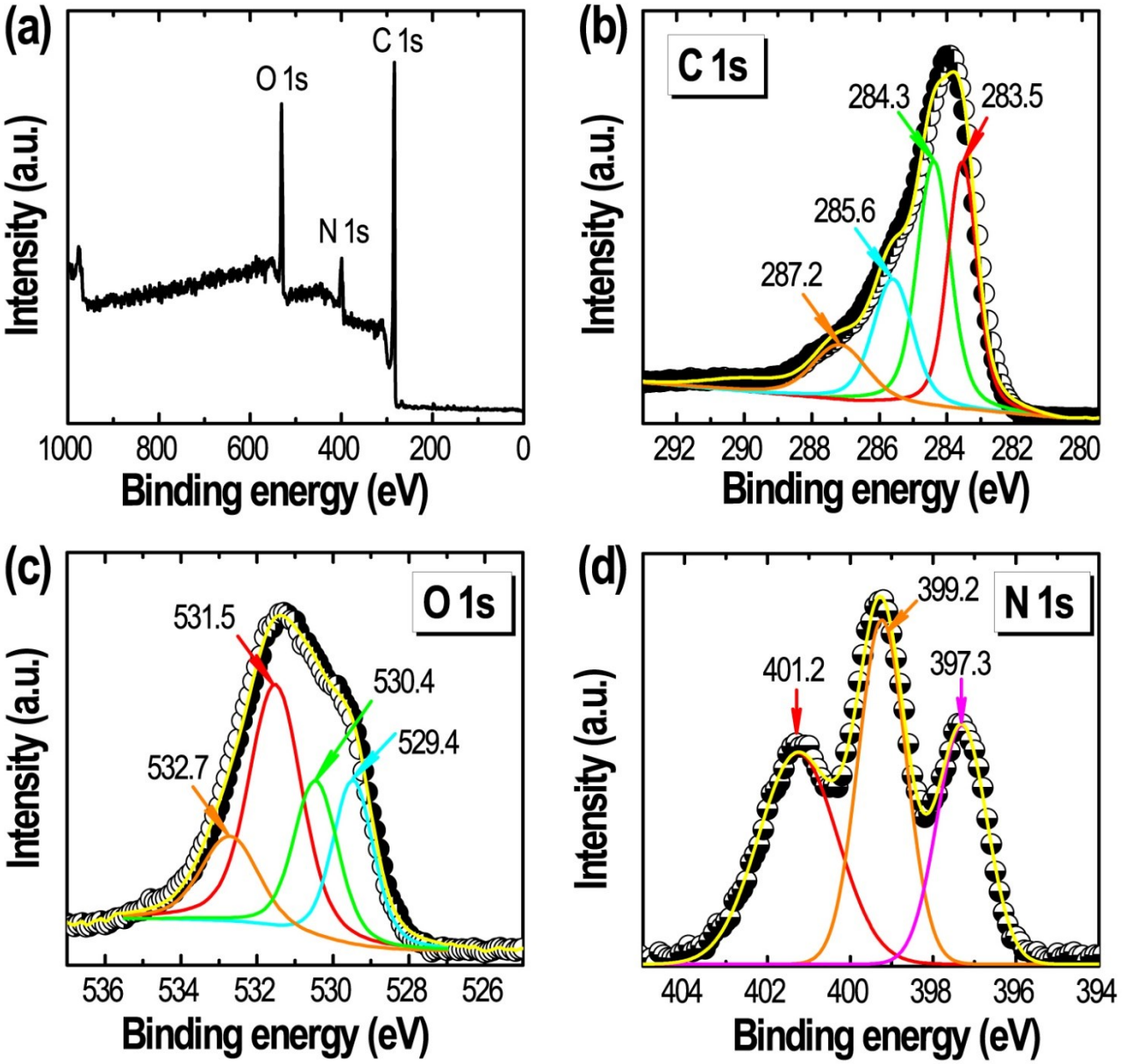

Figure S6: (a) XPS survey spectrum, (b) XPS core level C 1s spectrum with deconvoluted peaks, (c) XPS core level O 1s spectrum with deconvoluted peaks, and (d) XPS core level N 1s spectrum with deconvoluted peaks of TMPyP-TCPPNa nanofibers.

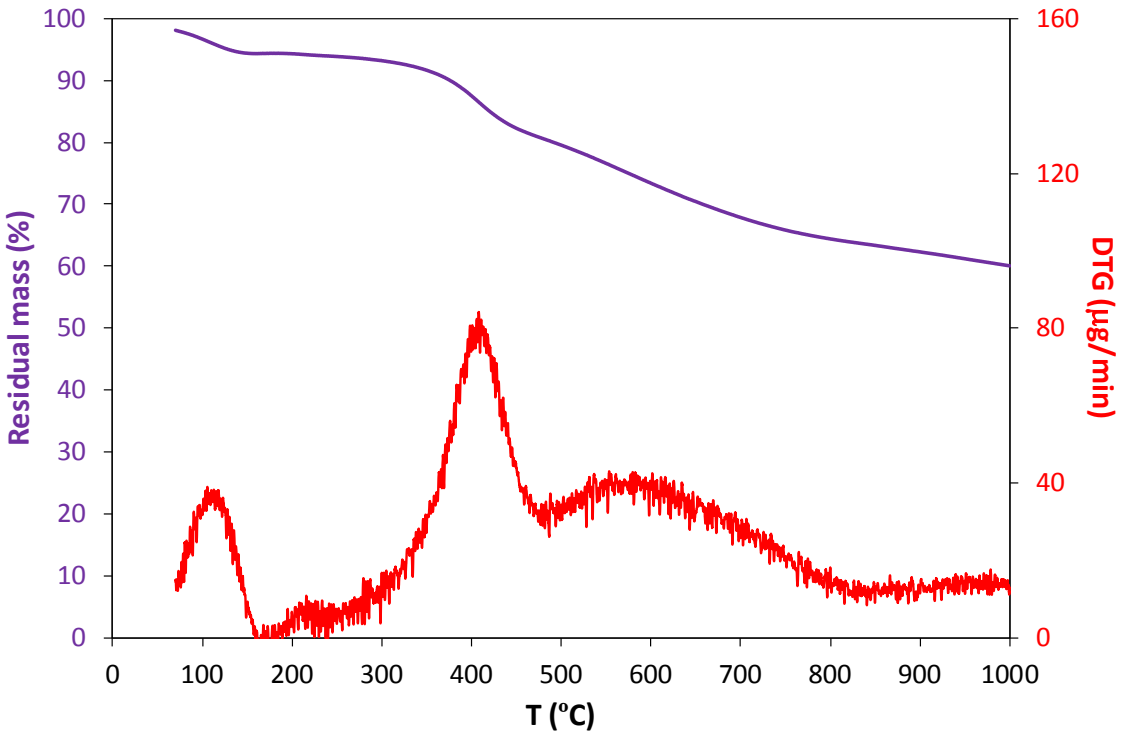

Figure S7: TGA and DTG curves of TMPyP-TCPPNa nanofibers. The heating rate was 10ºC/min.

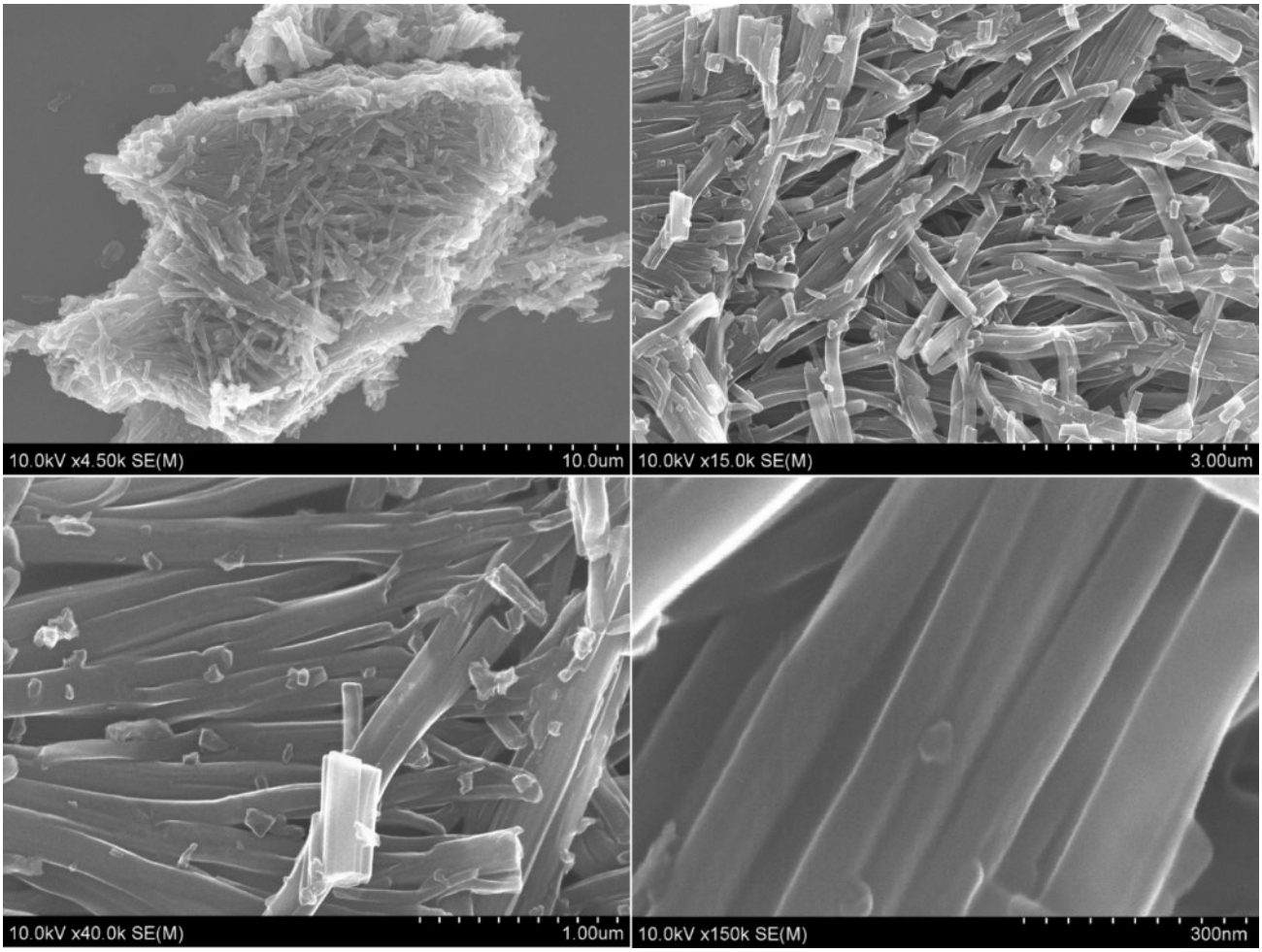

Figure S8: SEM images of TMPyP-TCPPNa nanofibers after pyrolysis of a dry powder at 1000 ºC under nitrogen atmosphere

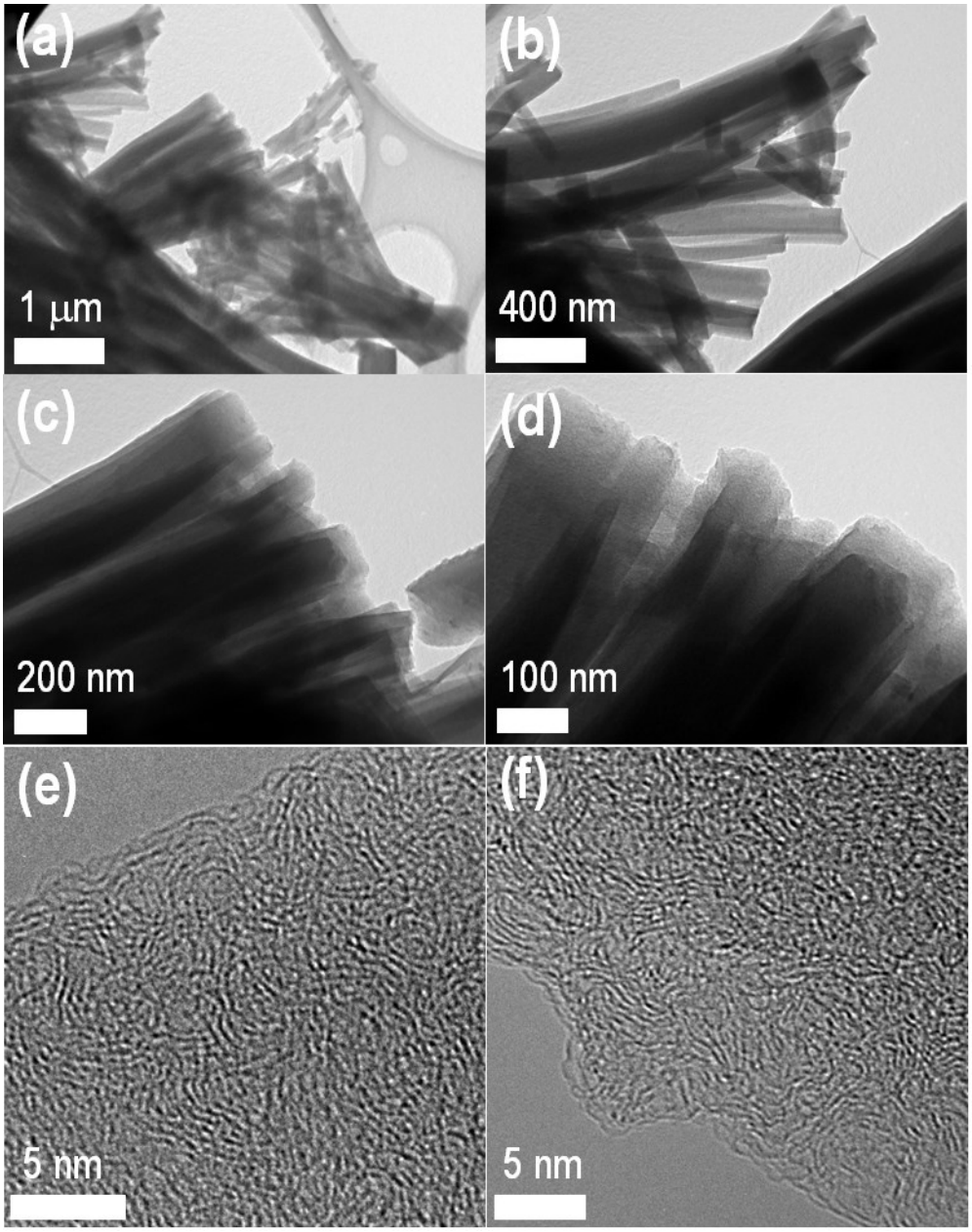

Figure S9. (a-d) TEM, and (e-f) HR-TEM images of carbon fibers obtained by the pyrolysis of the dry TMPyP-TCPPNa nanofibers.

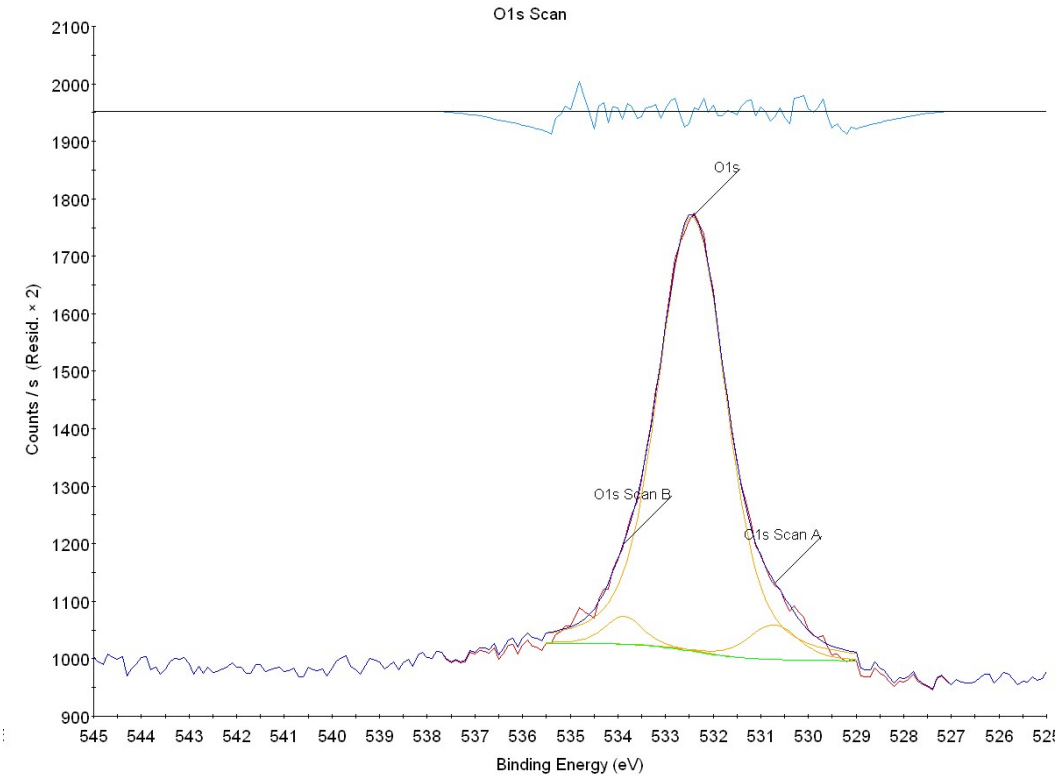

Figure S10: XPS O 1s spectra of TMPyP-TCPPNa pyrolyzed nanofibers

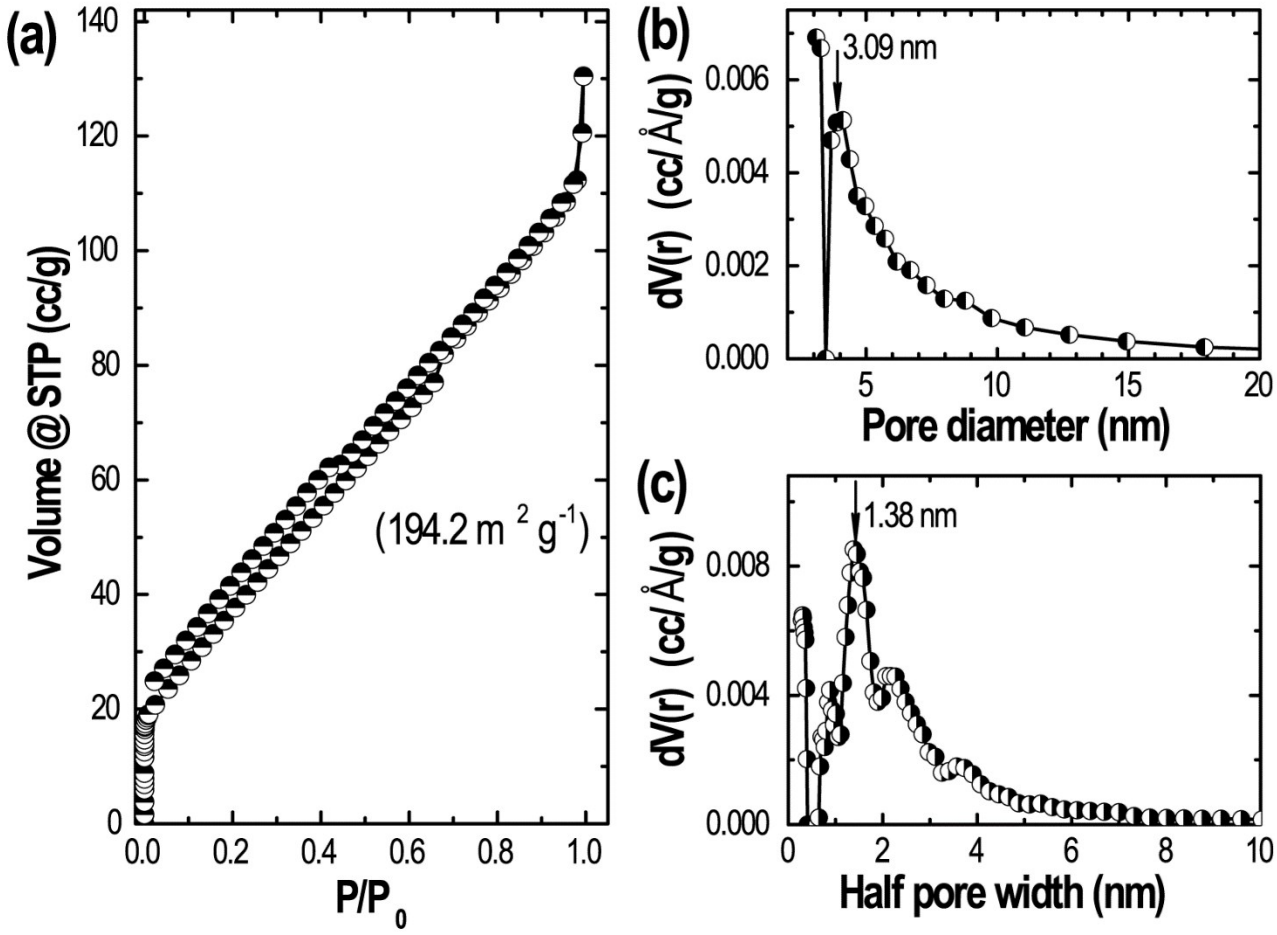

Figure S11 (a) N_2 adsorption/desorption isotherm of the carbon fiber, (b) pore size distribution obtained by BJH method, (c) pore size distribution obtained by DFT method,