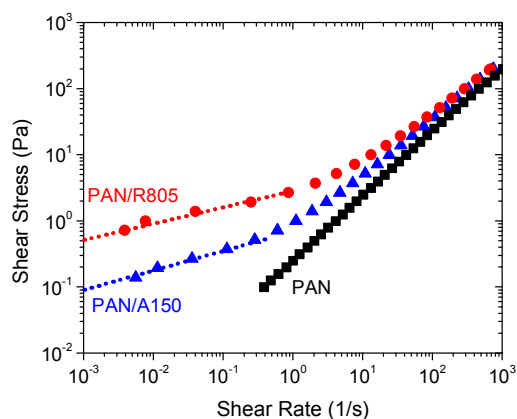
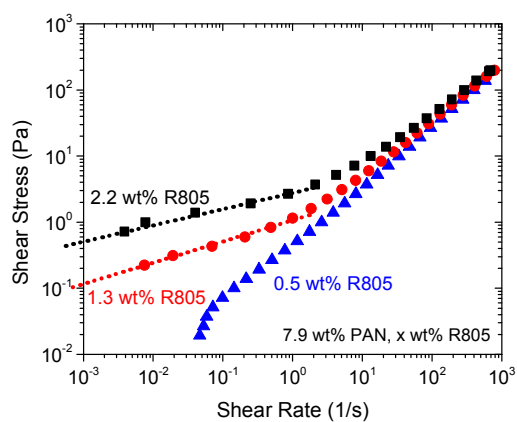


Supplemental Information

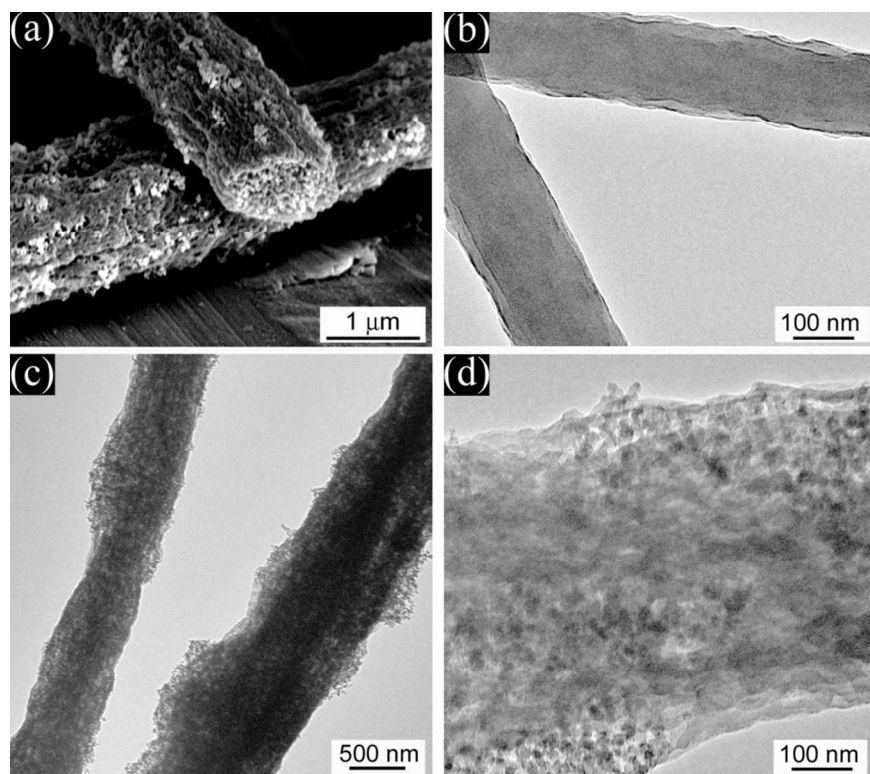


Supplemental Figure S1. Stress-strain relationship for 7.9 wt% PAN solutions with and without 2.2 wt% R805 and A150 FS. The dotted line approximates the “yield stress” via the extrapolation model.

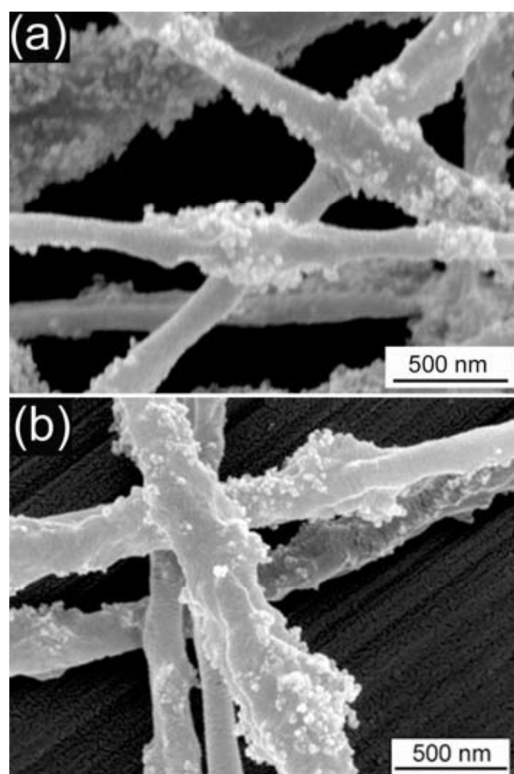


Supplemental Figure S2. . Stress-strain relationship for 7.9 wt% PAN solutions with and without 2.2 wt% R805 and A150 FS. The dotted line approximates the “yield stress” via the extrapolation model.

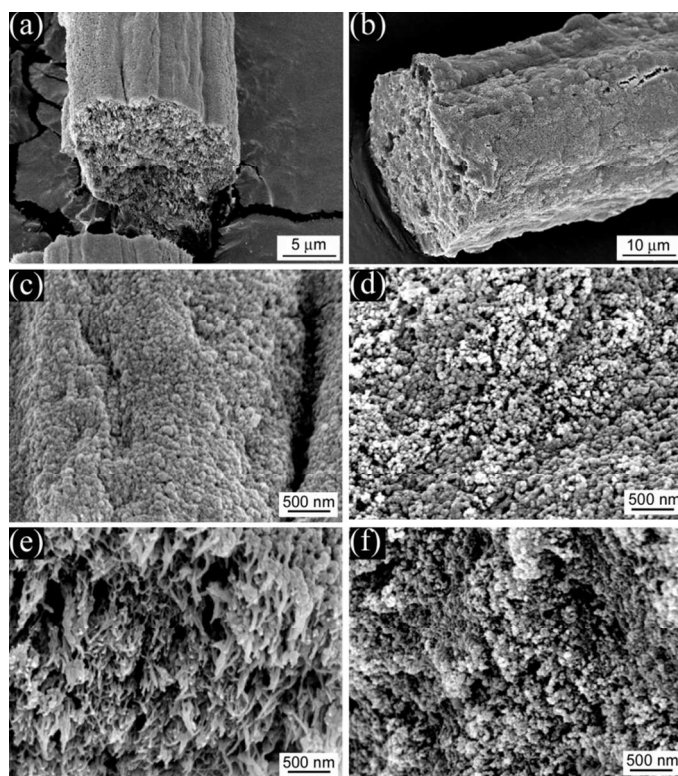
The dotted line approximates the “yield stress” via the extrapolation model.



Supplemental Figure S3. Scanning and transmission electron micrographs of PAN with R805 FS (a, c, d) and PAN only (b) electrospun fibers. Fiber cross section (a) was prepared by freeze fracture.



Supplemental Figure S4. Scanning electron micrographs of composite polymer/fumed silica electrospun fibers: PEO/R805 FS (a) and PEO/A200 FS (b). The precursor solutions contained PEO (4.6%): FS (2.2%): DMF (93.2%).



Supplemental Figure S5. SEM images of PAN fiber (a), top surface (c), cross section (e); and PAN/R805 FS fiber (b), top surface (d), cross section (f) prepared by wet spinning.