

## Supporting Information

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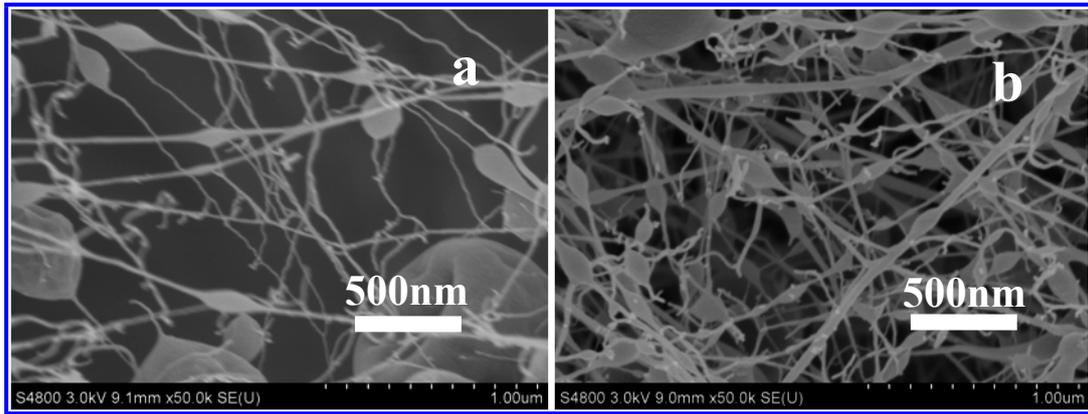


Figure S1. SEM micrographs of SF nanofibres with beads electrospun from LiBr-FA solution with 1% (a) and 2% (b) concentration.

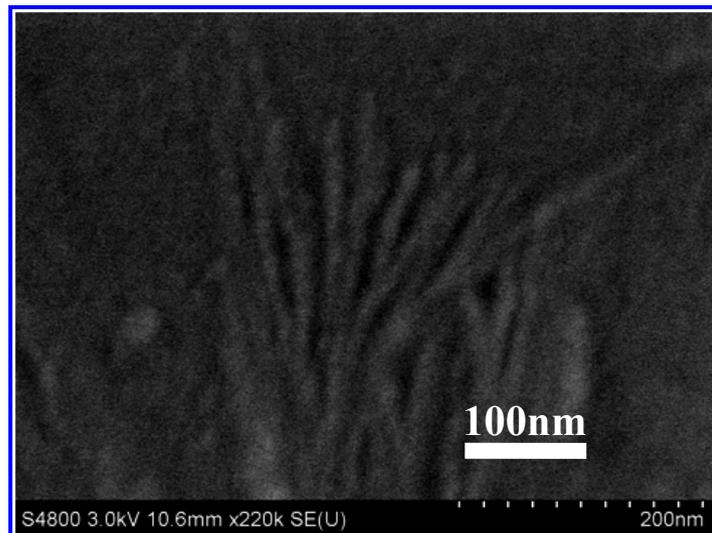


Figure S2 Silk fibrils are composed of smaller nanofibrils with the diameter of about 10nm.

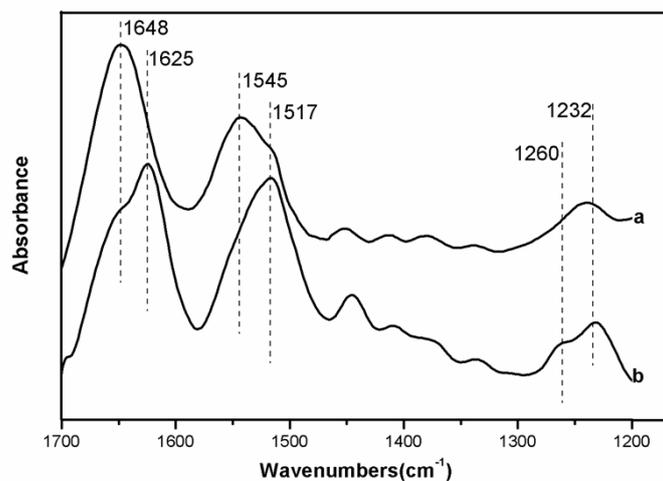


Figure S3. FTIR spectra of electrospun SF nanofibres before (a) and after (b) 75% ethanol treatment.

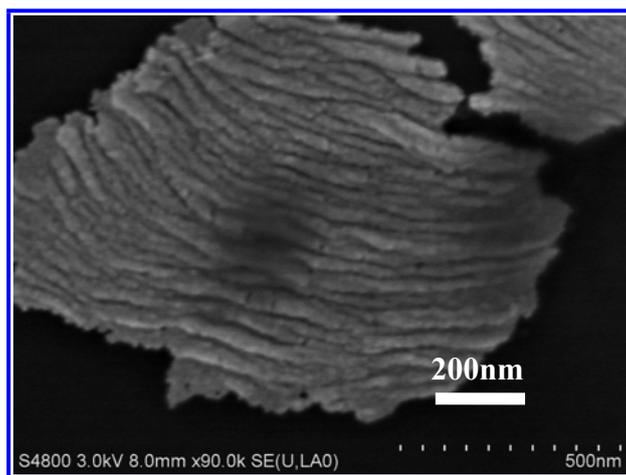


Figure S4. SEM micrograph of silk nanofibrils. The degummed silk was dissolved in HFIP with a concentration of 0.5% (w/v) for 3 months, which demonstrated a self-assembled sheet structure consisting of nanofibrils.

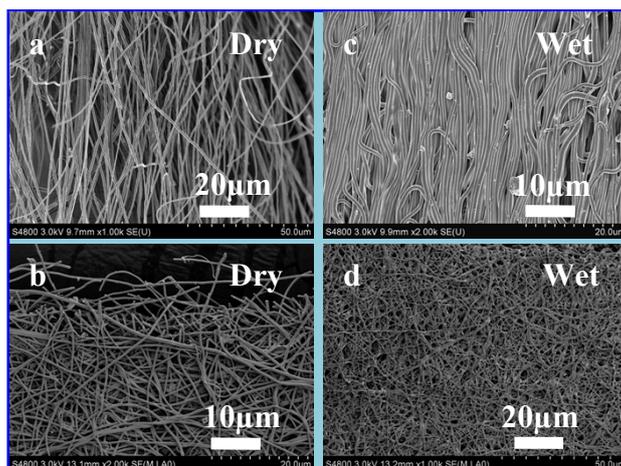


Figure S5. SEM micrographs of longitudinal fracture morphology of electrospun SF nanofibers prepared from (a,c) SF-LiBr-FA solution, (b,d) SF-FA solution in dry and wet conditions. SF-FA solution was used as control and prepared as in the previous reports [20, 21].