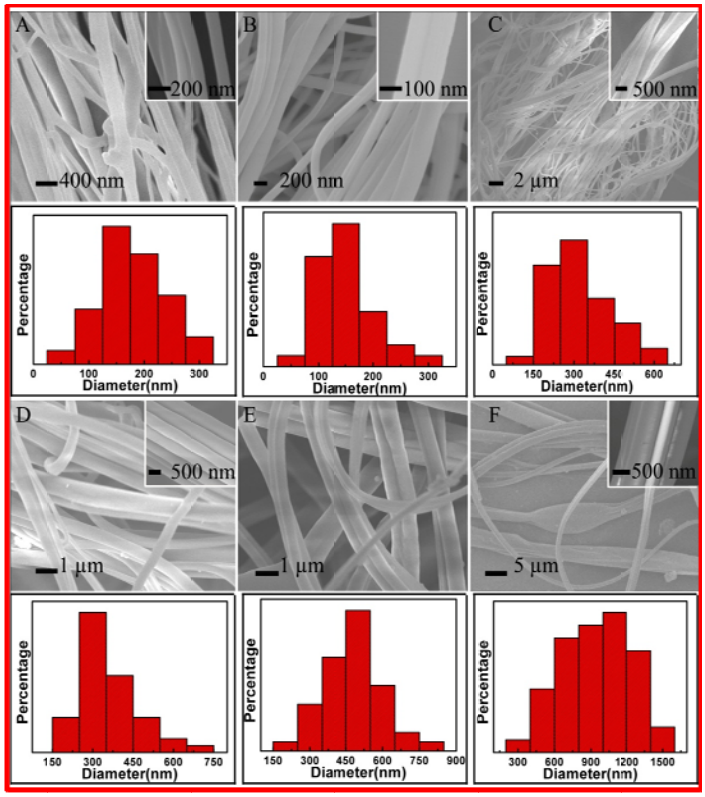
Supporting Information

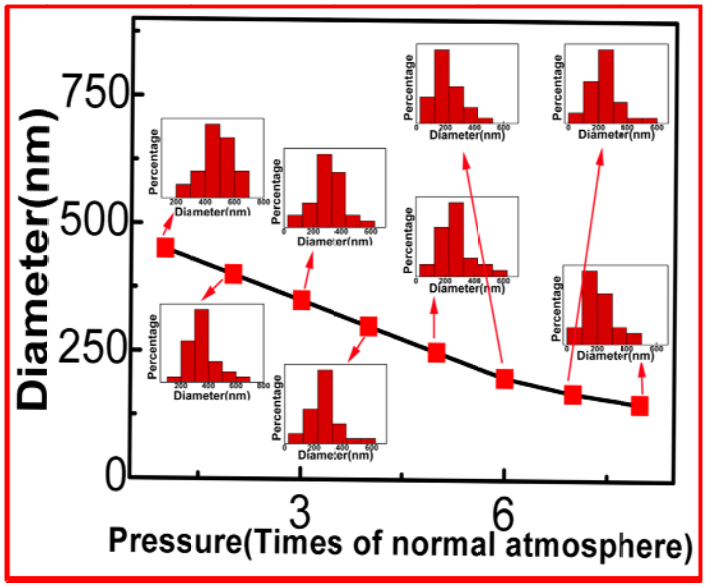
This file contains Figures S1 to S5 with legends and a Stable 1.

SFigure 1



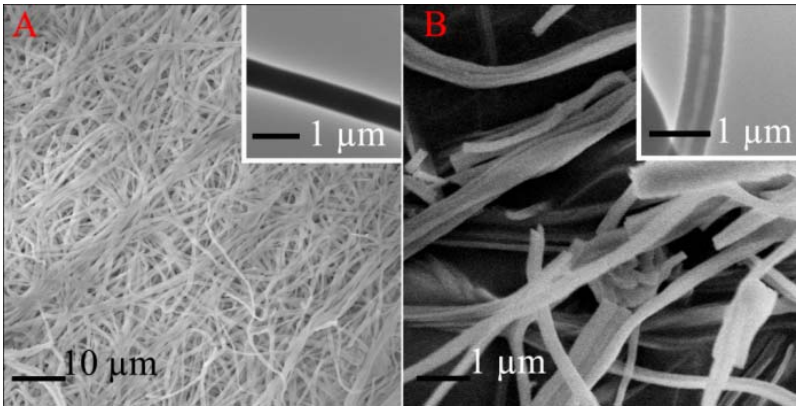
SFigure 1. Scanning electron microscopy and diameter distribution of the droplet elongating spun fibers under the fix temperature field (60 °C), pressures (seven times normal atmosphere) and grids (a 200 mesh filter) for samples collected at locations 180 cm away from the spray nozzle under different of the concentration of the solution:4, 7.5, 10, 12.5, 15 and 20 wt% , respectively.

SFigure 2



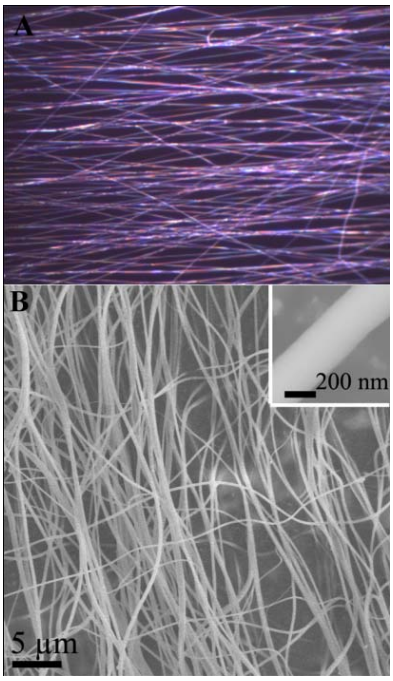
SFigure 2. Diameter of PVP nanofibers under a fixed square grids (a 100 mesh filter), polymer concentration (5 wt%), temperature (60 ℃), for samples collected at locations 180 cm away from the spray nozzle under different pressures.

Sfigure 3



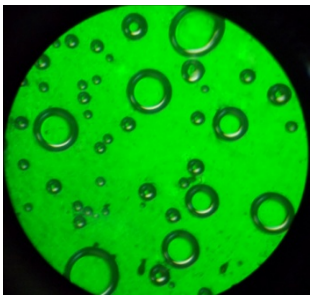
SFigure3. Scanning electron microscopy showing spun CuO and SiO_2 nanofibers without calcinations. A) CuO nanofibers. B) SiO_2 nanotubes. The insets are transmission electron micrograp of the nanofibers and nanotubes.

SFigure 4



SFigure 4 A) Optical micrographs of the aligned nanofibers suspended over the U-shaped frame, B) Scanning electron microscopy images of aligned PVP nanofibers. In order to get aligned nanofibers, the nanofibers were stretched across the gap to form a parallel array. A stainless steel U-shaped frame with a distance of 4 mm between two branches was used to transfer the aligned nanofibers by vertically moving through the gap.

SFigure5



SFigure5. Photographs of cells that have undergone droplet-elongated spinning.

STable 1 Rate of cell survival assessment by way of flow cytometry after 3h.

Cellular dynamics	Electrospinning[a]	droplet-elongated spinning[b]
Cell debris	2.50	1.16
Apoptotic	8.80	7.24
Live	7.20	35.2
Necrotic	80.5	55.4

[a]Cells that have undergone electrospinning,

[b] Cells that have undergone droplet-elongated spinning.