

Supporting Information

Ultralight, Super-compression, and Hydrophobic Nanofibrous Aerogels from Thermally-crosslinked Cellulose Acetate/Polyethylene Oxide Nanofibers for Efficient and Recyclable oil absorption

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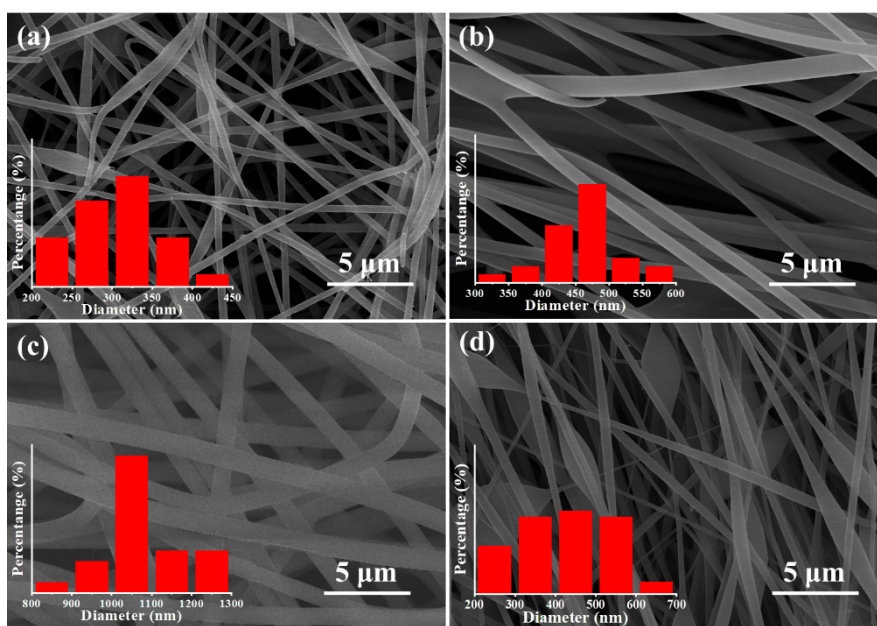


Figure S1. SEM images of electrospun nanofibers with different CA/PEO ratios and the corresponding statistical graphics of diameter distribution: (a) 1:1, (b) 2:1, (c) 3:1, and (d) 1:0.

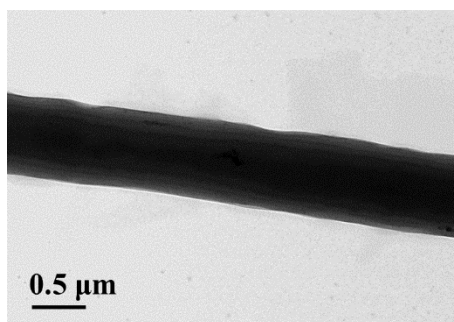


Figure S2. TEM image of CA/PEO nanofiber.

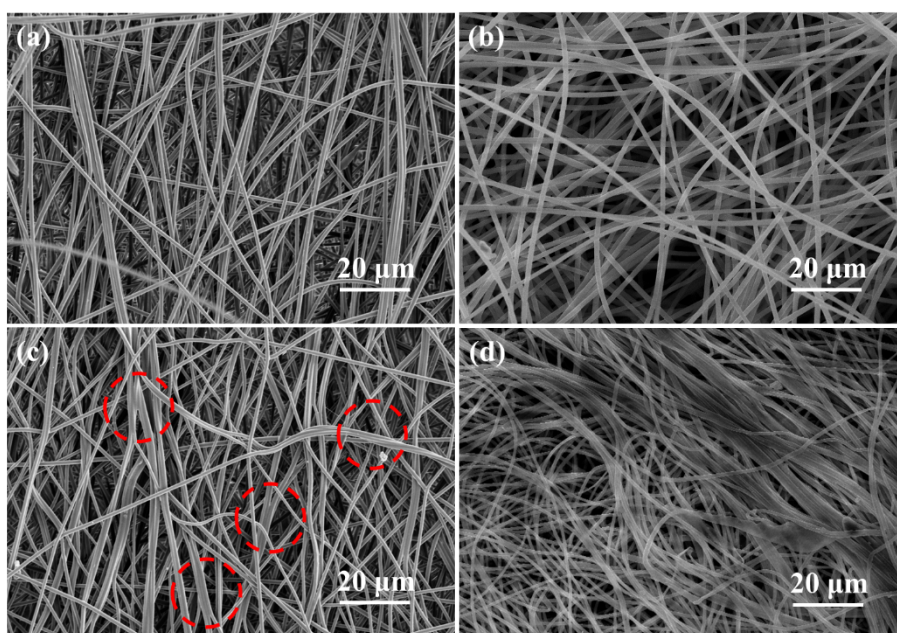


Figure S3. SEM images of thermally-crosslinked CA/PEO nanofibers at different temperatures: (a) room temperature, (b) 50 °C, (c) 70 °C, and (d) 100 °C. The red circle marked the crosslinking points between nanofibers.

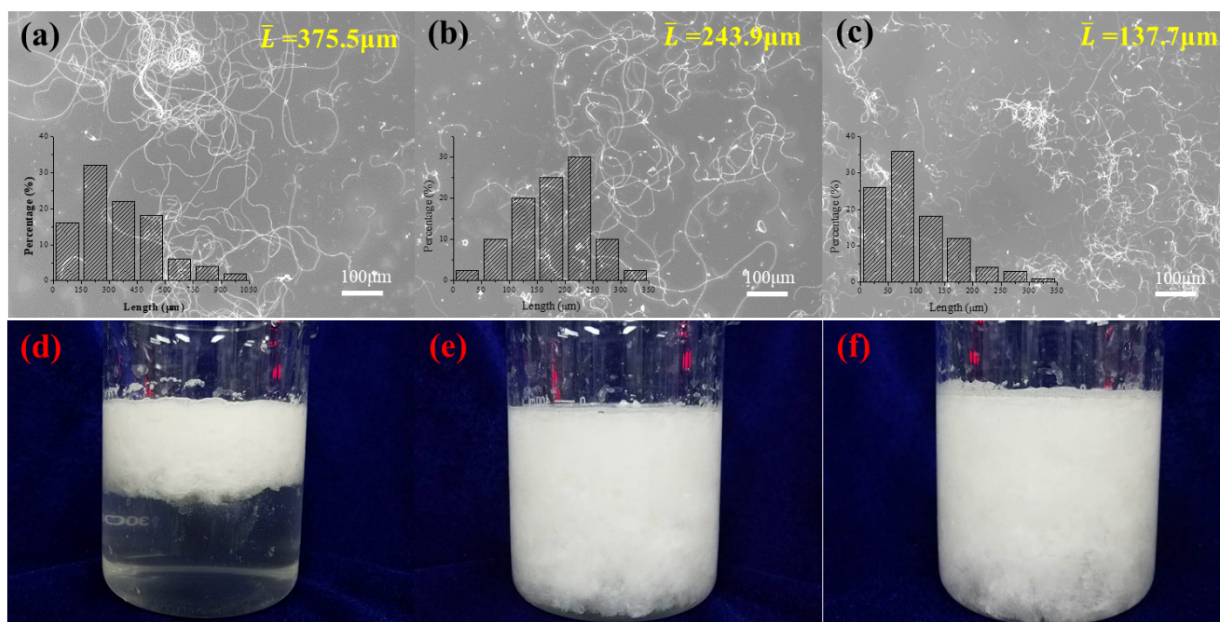


Figure S4. SEM images of chopped fibers with different dispersion lengths and the corresponding statistical data of length distribution: (a, d) 20 min, (b, e) 30 min, and (c, f) 40 min.

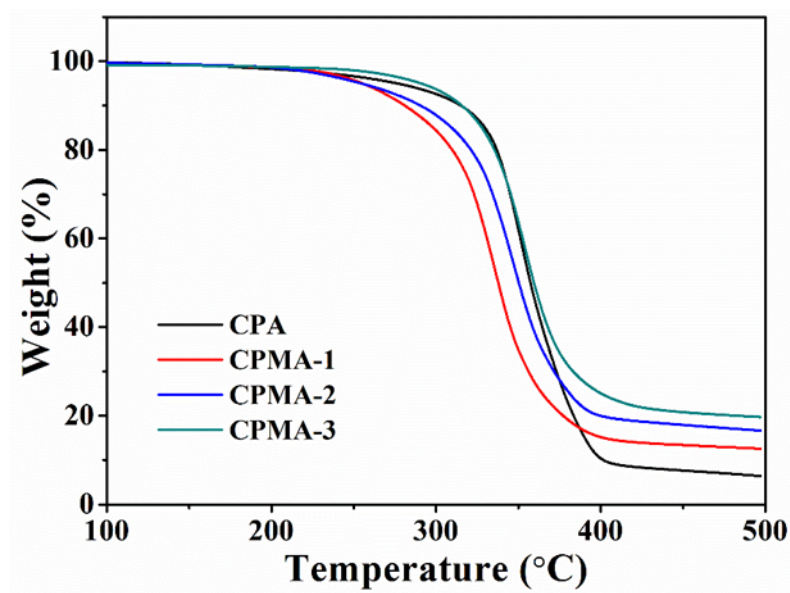


Figure S5. TGA curves of CPA and CPMA-1, 2, 3

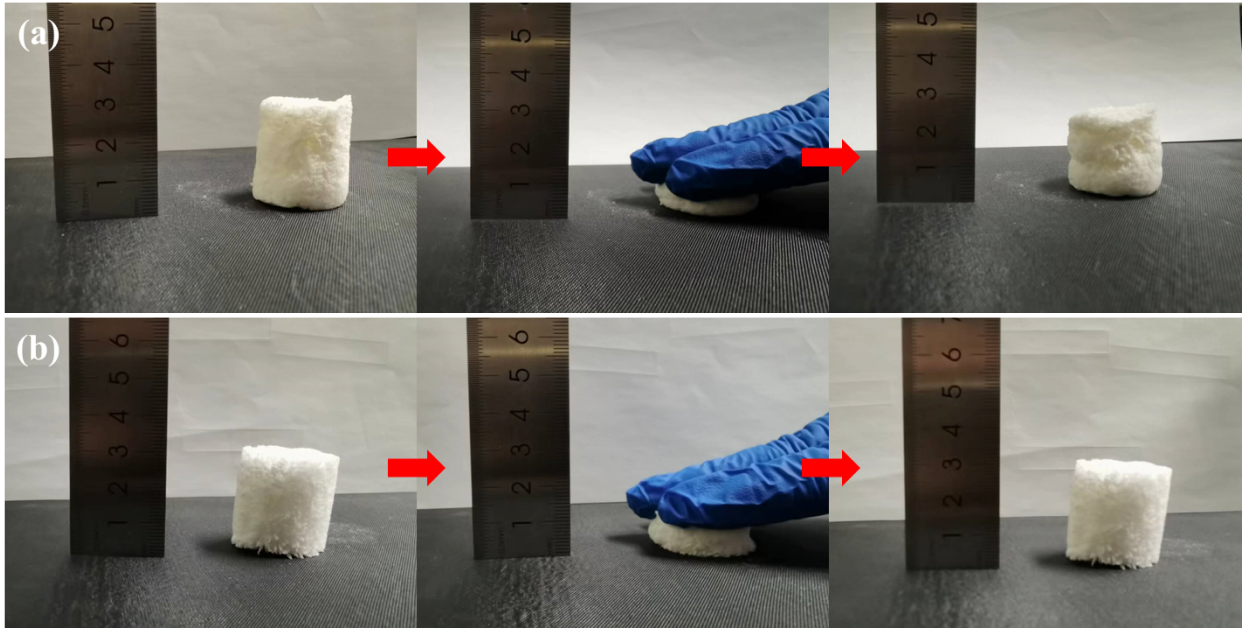


Figure S6. Photos of the compression-recovering process of (a) CPA and (b) CPMA.

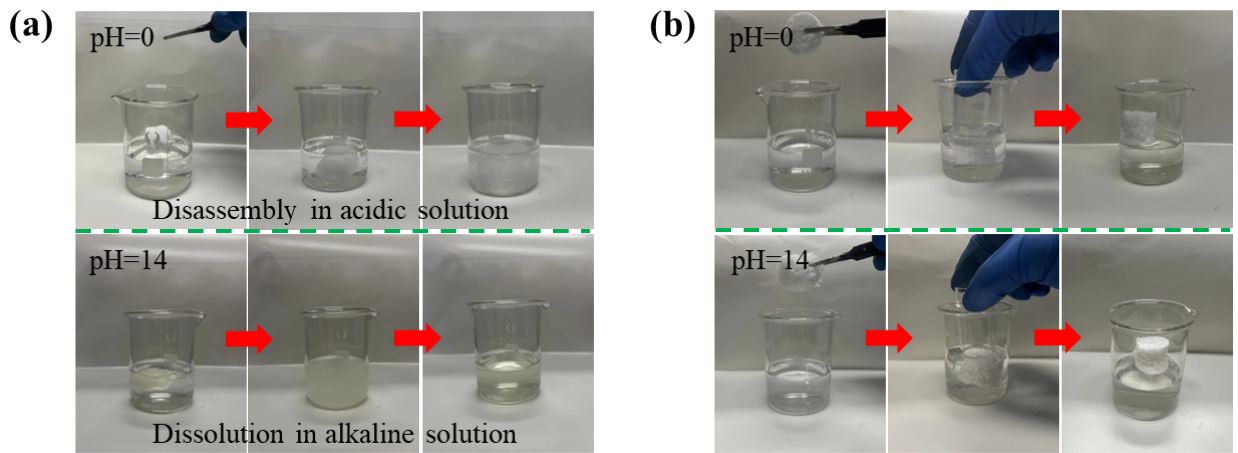


Figure S7. Photos of acid and alkali resistance test. (a) CPA, (b) CPMA-3. The CPMA-3 aerogel samples will always float on the liquid surface and external force was needed to keep it immersed.