Supporting Information

Qualifying the Contribution of ~~Fiber Size~~ Fiber Diameter on the Acrylate-based Electrospun Shape Memory Polymer Nano/microfiber Properties

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Table S1: Electrospinning Conditions

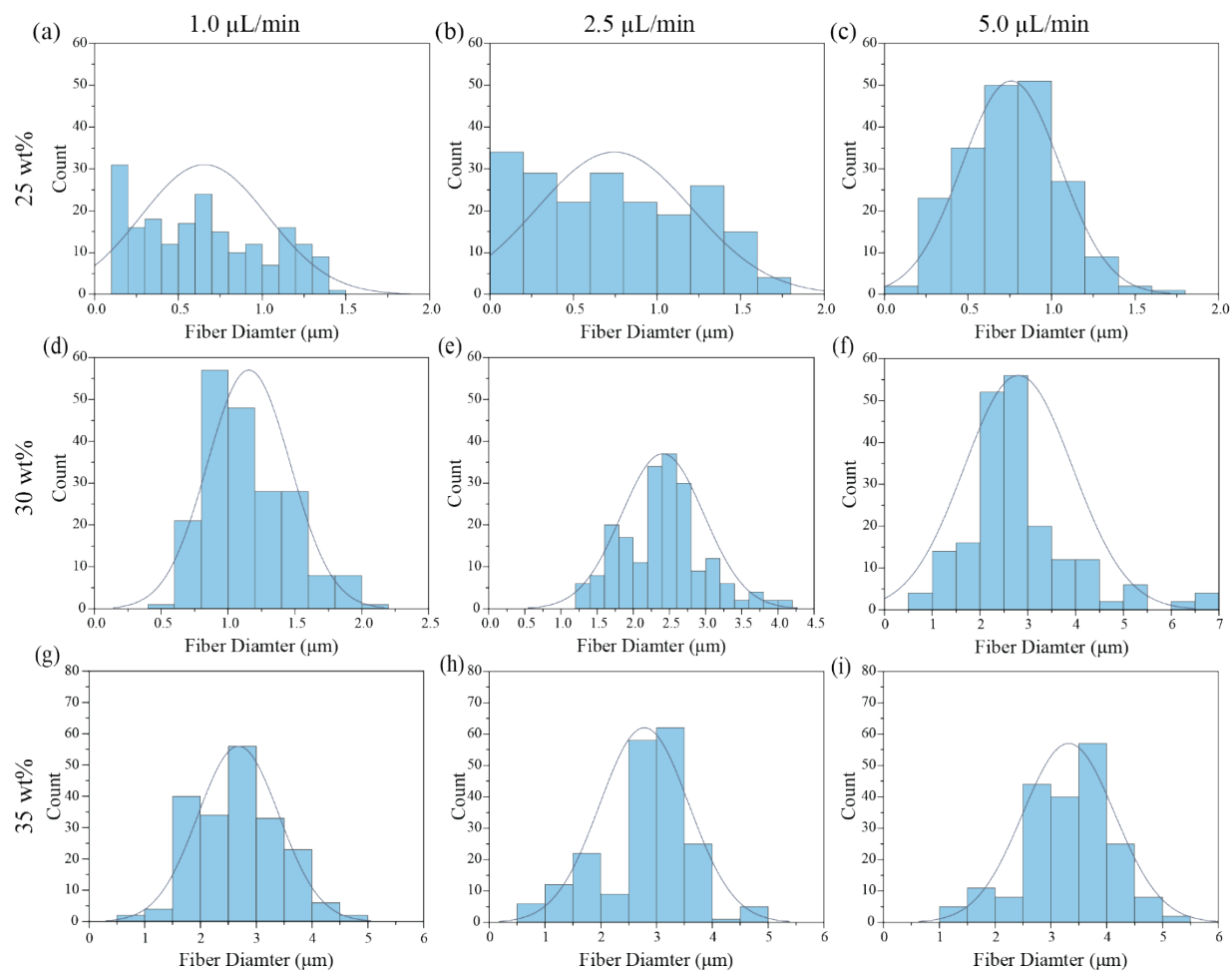| Polystyrene (PS) concentration (wt%)	tD : PS (wt%)	Flow rate (μL/min)	Voltage (kV)	Working distance (cm)
25	1 : 1	1, 2.5, 5	25	17
30	1 : 1	1, 2.5, 5	25	17
35	1 : 1	1, 2.5, 5	25	17
40	1 : 1	0.75, 1, 2.5, 5, 7.5, 10	25	17

Figure S1: Histogram of fiber diameter distribution of electrospun nanofibers with differrnt PE solution concentration of 25 wt% (a-c), 30 wt% (d-f) and 35 wt% (g-i) at various flow rates of 1.0 µL/min (a, d, g), 2.5 µL/min (b, e, h) and 5.0 µL/min (c, f, i).
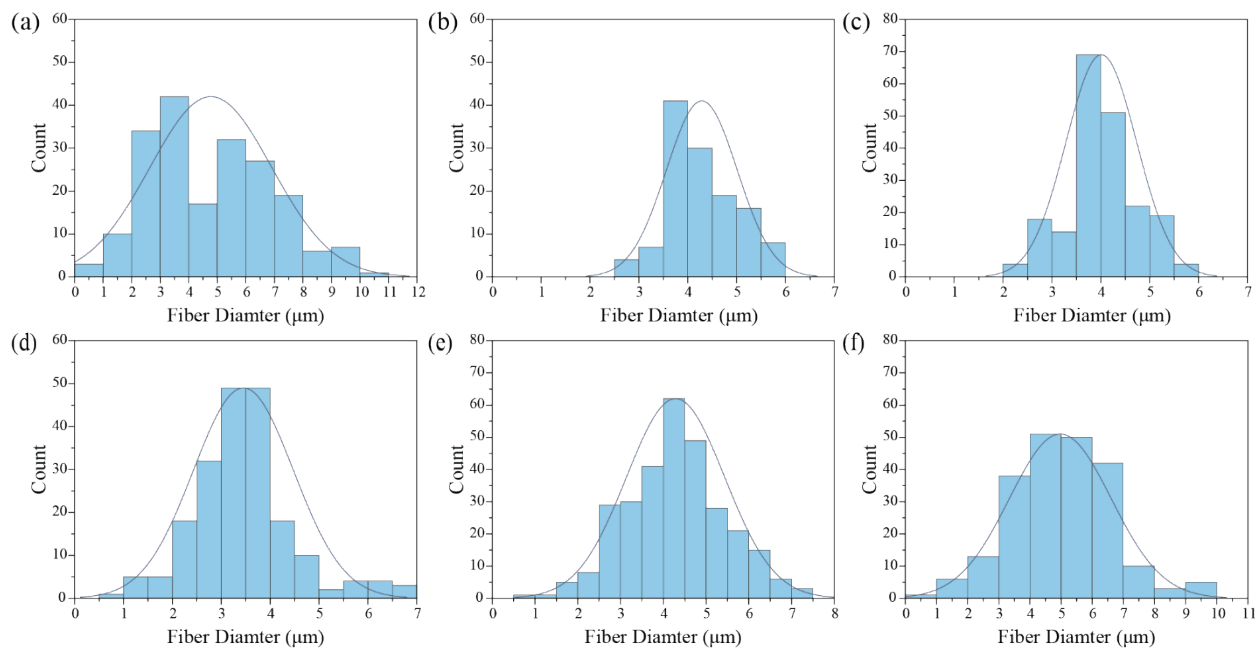
Figure S2: Histogram of fiber diameter distribution of electrospun nanofibers with 40 wt% PE solution at various flow rates; (a) 0.75 µL/min, (b) 1.0 µL/min, (c) 2.5 µL/min, (d) 5.0 µL/min, (e) 7.5 µL/min, and (f) 10.0 µL/min.
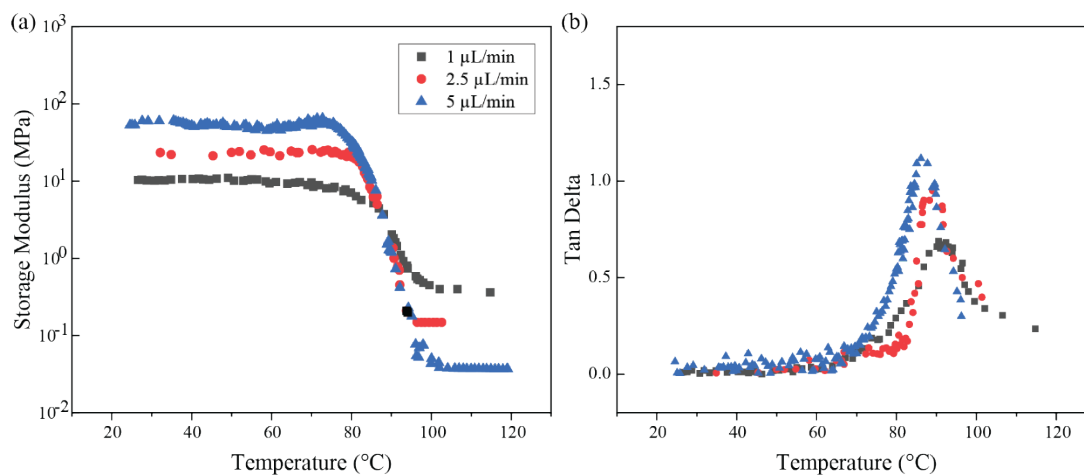
Figure S3: (a) Storage modulus and (b) tan delta obtained from DMA tests for electrospun fibers with 35 wt% PE solution at different flow rates**.**

Video 1. The shape memory effect of the tBA/PS (35%) sample at a flow rate 5.0 µL/min during the heating process.