

Supporting Information

Selectively actuated multi-shape memory effect of a polymer multicomposite

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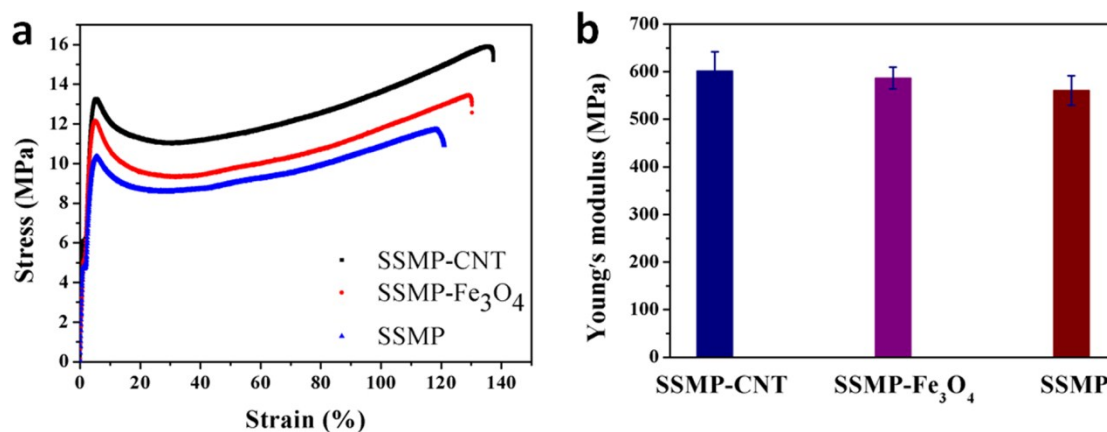


Figure S1. (a) Tensile results at room temperature, and (b) Young's modulus values from the tensile test of pure SSMP, SSMP-Fe₃O₄ and SSMP-CNT composites.

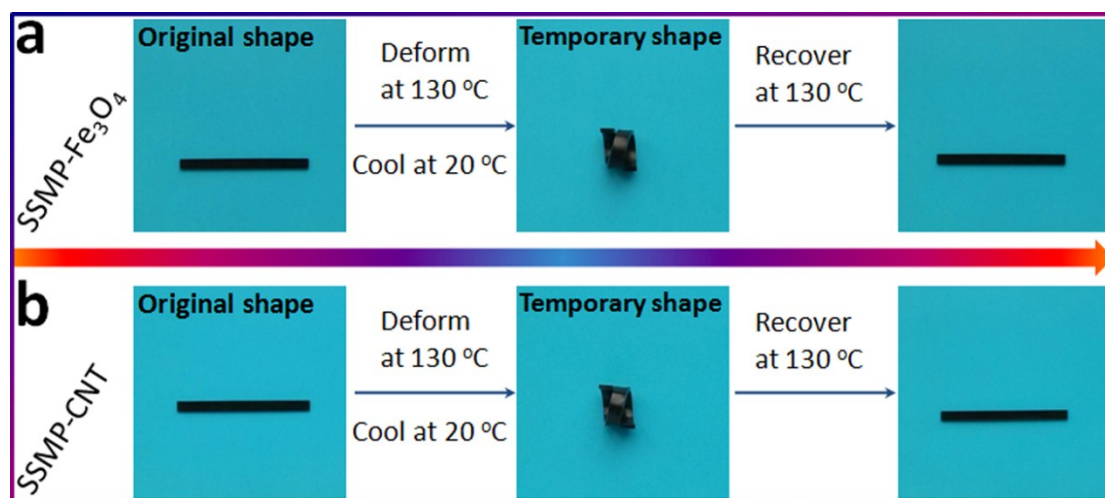


Figure S2. Series of photographs showing dual-shape memory recovery process of the SSMP-Fe₃O₄ (a), and SSMP-CNT composites (b) in 130 °C oven.

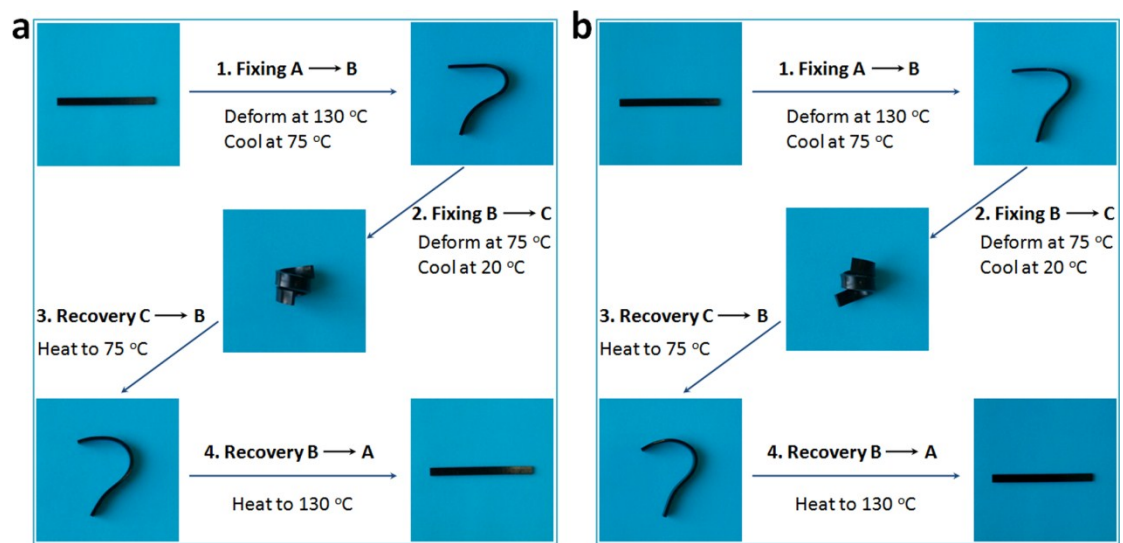


Figure S3. (a, b) Illustration of the triple shape memory effect of SSMP-Fe₃O₄ and SSMP-CNT:

A) original shape, B) first temporary shape, and C) second temporary shape.

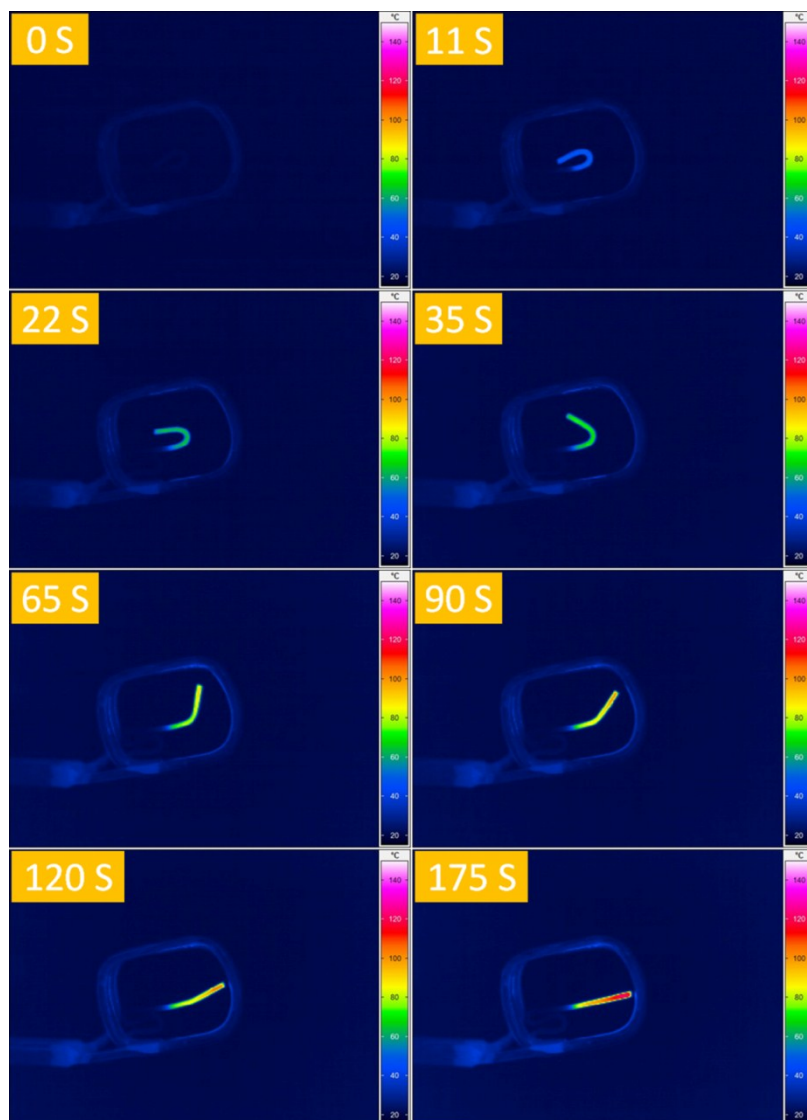


Figure S4. Photos of the multicomposite sample during recovery in alternating magnetic field taken with an infrared camera.

Table S1

Mechanical properties of neat SSMP, SSMP-Fe₃O₄ and SSMP-CNT samples.

Samples	SSMP	SSMP-Fe ₃ O ₄	SSMP-CNT
Young's modulus (MPa)	560.46 ± 15.96	586.67 ± 11.51	601.96 ± 19.79
Tensile strength (MPa)	11.72 ± 0.34	13.46 ± 0.27	15.92 ± 0.52
Elongation at break (%)	120.96 ± 3.45	130.29 ± 2.61	137.40 ± 4.47



Movie S1.mp4

Movie S1. Alternating magnetic field inducing shape memory recovery process.



Movie S2.mp4

Movie S2. Radiofrequency inducing shape memory recovery process.



Movie S3.mp4

Movie S3. Direct heating inducing shape memory recovery process at 130 °C.