

## Supplementary Information

# Alternating Magnetic Field-triggered Switchable Nanofiber Mesh for Cancer Thermo-chemotherapy

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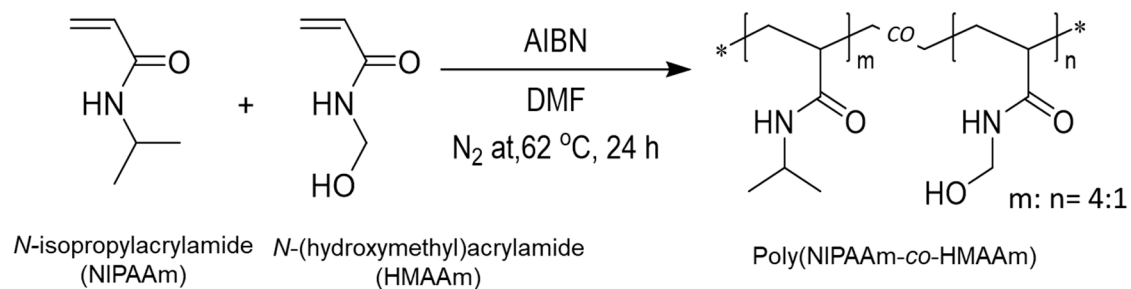
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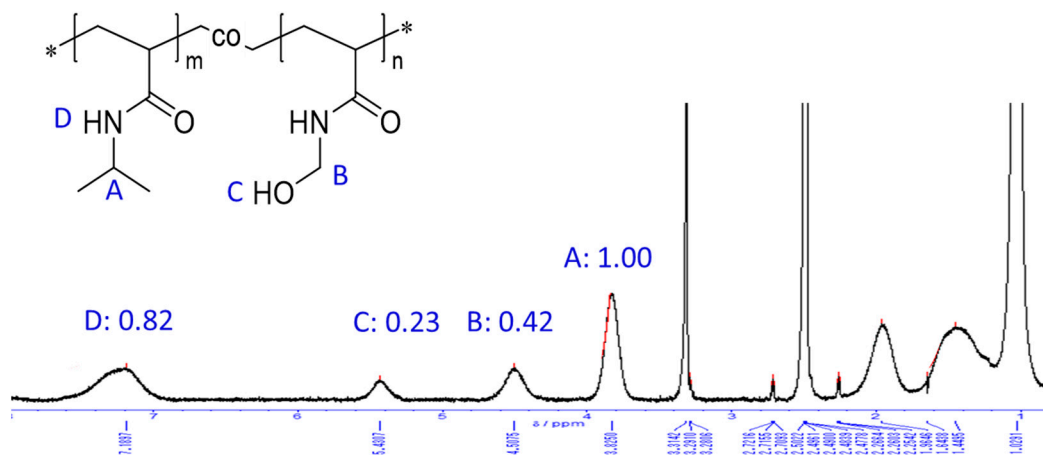
**Table S1.** Characteristic data of poly(NIPAAm-co-HMAAm).

Feed (mol%)		Contents (mol%) <sup>1</sup>		Mn <sup>2</sup>	Mw <sup>2</sup>	Mw/Mnm <sup>2</sup>
NIPAAm	HMAAm	NIPAAm	HMAAm			
80	20	79	21	$4.99 \times 10^4$	$1.39 \times 10^5$	2.78

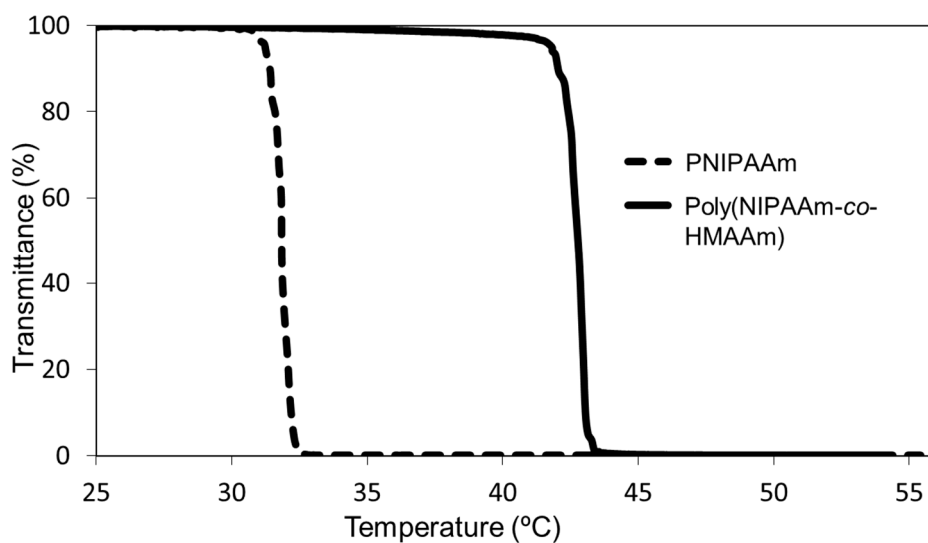
<sup>1</sup> Measured by <sup>1</sup>H NMR. <sup>2</sup> Measured by GPC.



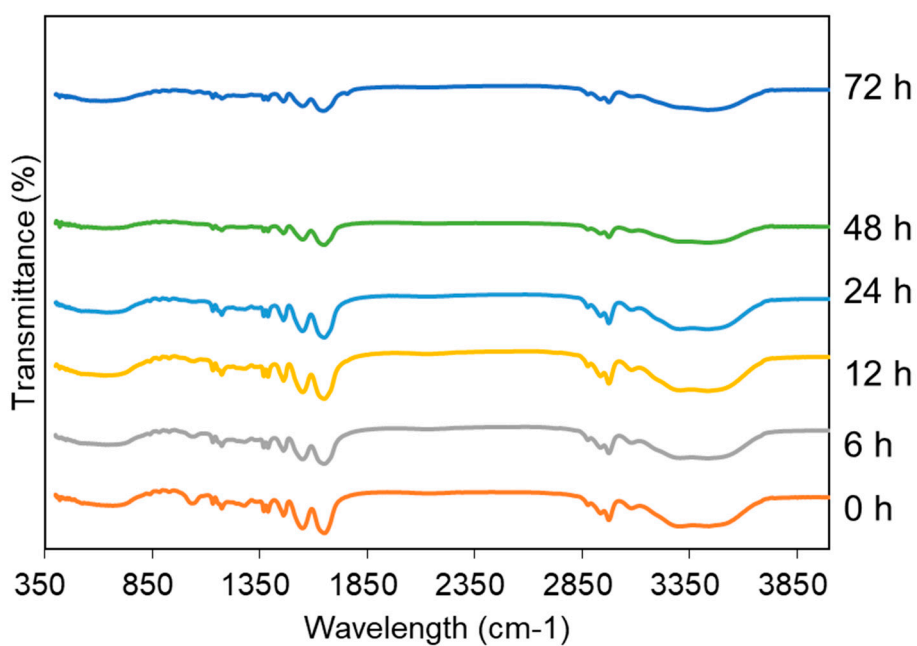
**Scheme S1.** Copolymerization of poly(NIPAAm-co-HMAAm).



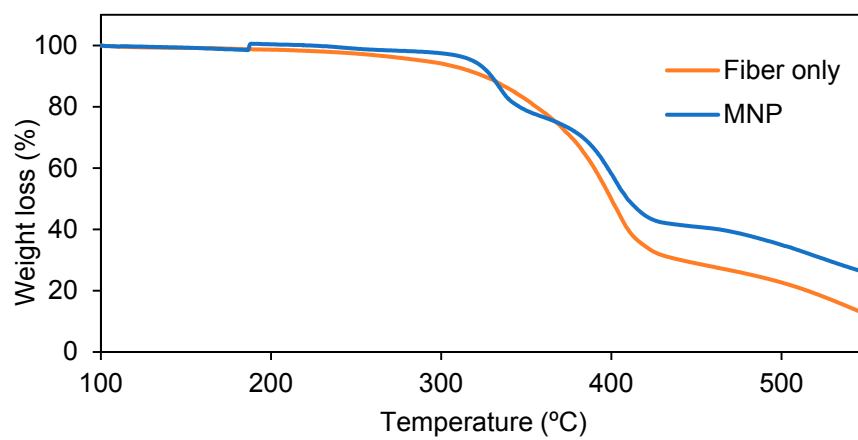
**Figure S1.** <sup>1</sup>H NMR spectrum of poly(NIPAAm-co-HMAAm).



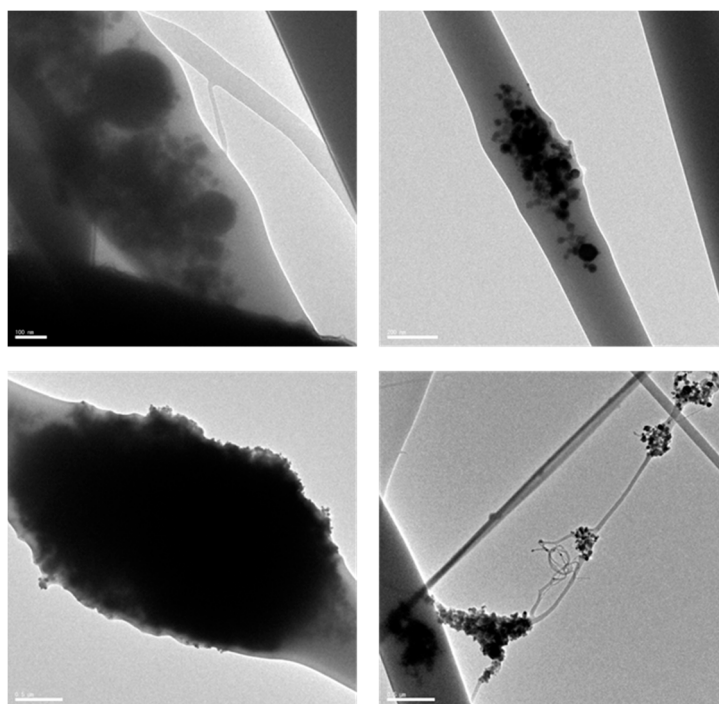
**Figure S2.** Temperature-dependent transmittance changes of PNIPAAm and poly(NIPAAm-co-HMAAm) solution.



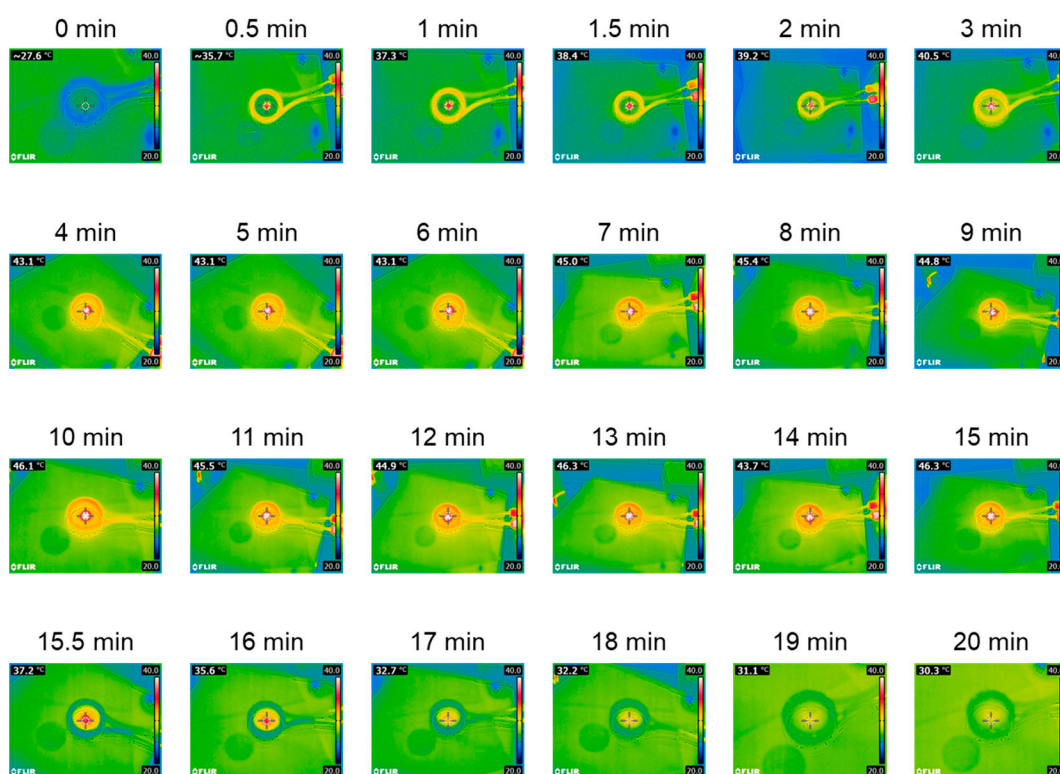
**Figure S3.** FTIR spectra of poly(NIPAAm-co-HMAAM) with different crosslinking time (0-72 h). Peak at 1050 and 3300  $\text{cm}^{-1}$  are assigned to the stretching of C-O-H and -OH groups in HMAAm, respectively.



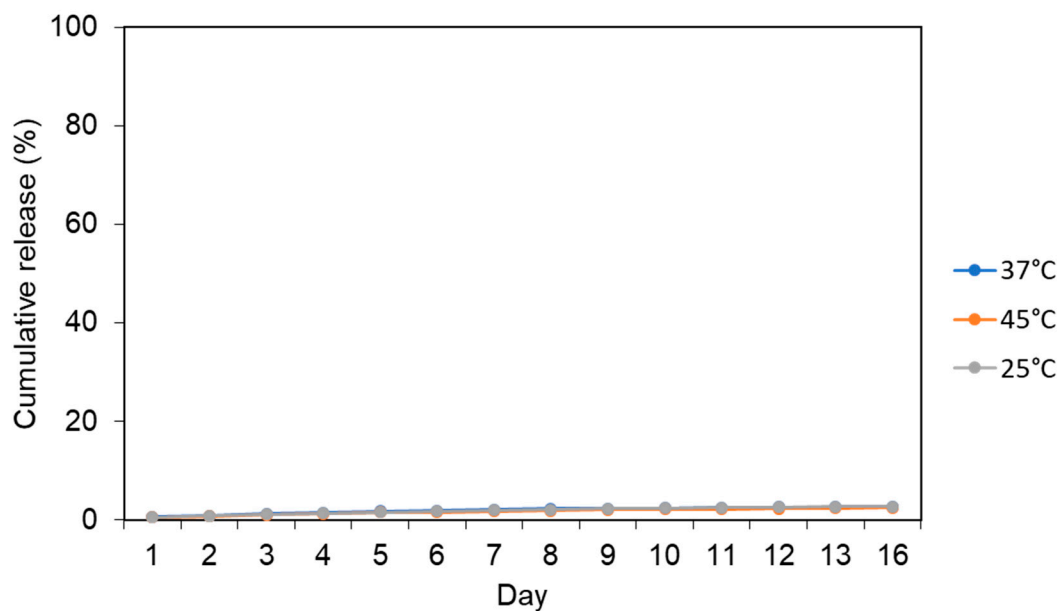
**Figure S4.** Thermal studies showing the TG curves for fiber only and MNP.



**Figure S5.** TEM observation of fiber with 60 wt % of MNPs. A scale bar is 500 nm.



**Figure S6.** IR thermal images of the MNPs-incorporated fiber mesh in AMF. The AMF was turned on at time 0-min and turned off at time 15-min.



**Figure S7.** Long term drug release from the fiber mesh at 25 °C, 37 °C, and 43 °C.