

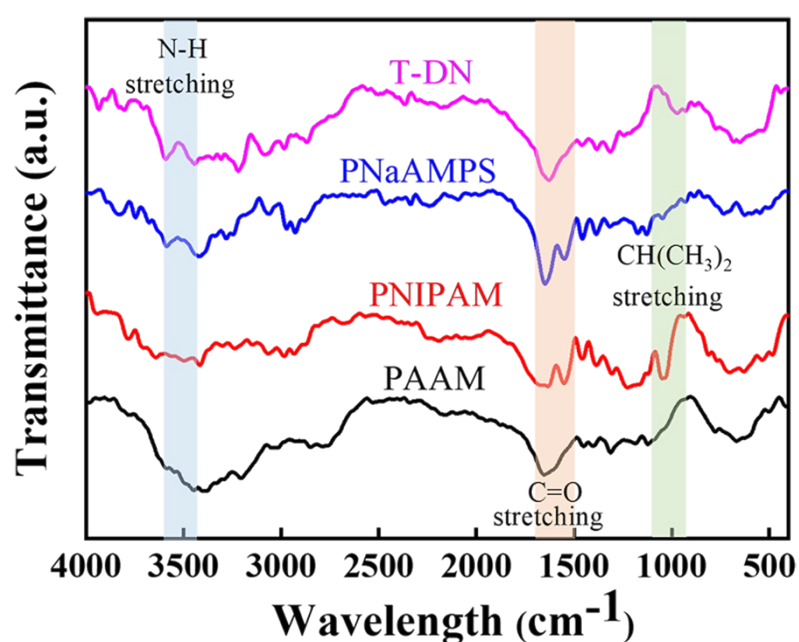
## Supporting Information

### High-strength, thermosensitive double network hydrogels with antibacterial functionality

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**Figure S1.** FTIR spectra of PNaAMPS, PNIPAM, PAAM, and T-DN hydrogels.

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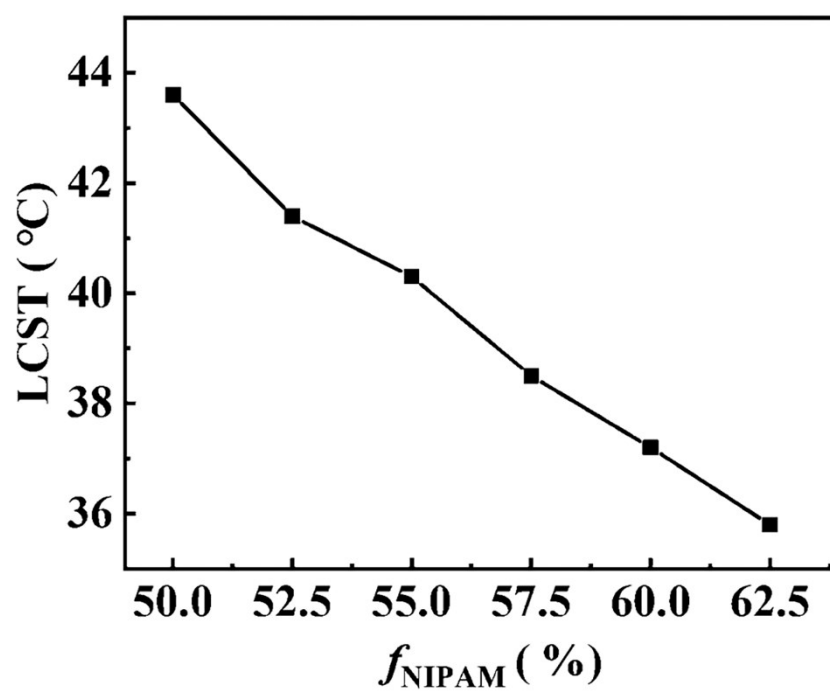
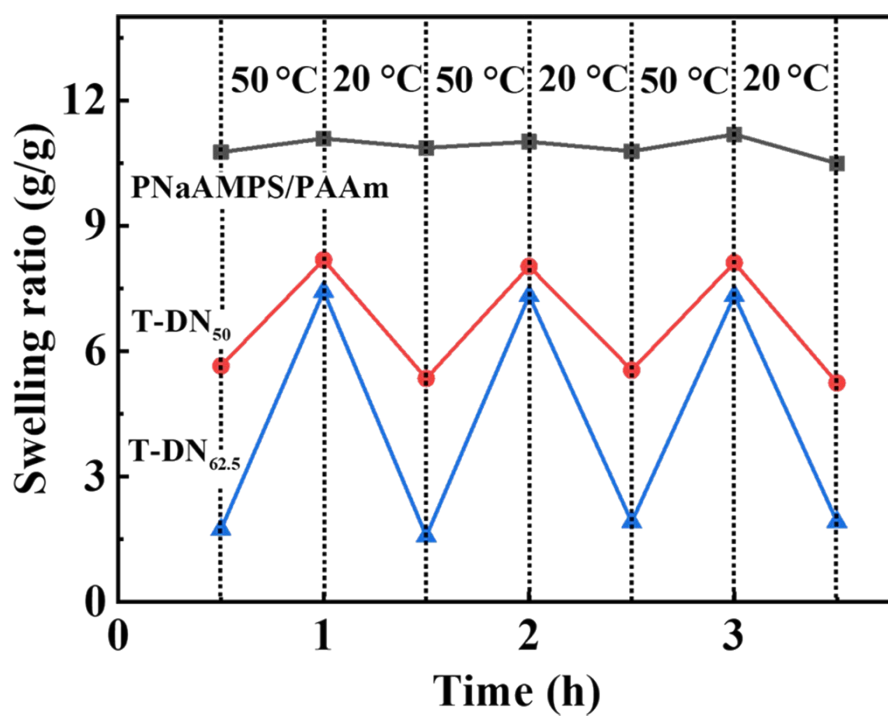


Figure S2. Effect of NIPAM content on LCST of T-DN hydrogel.



**Figure S3.** Oscillating swelling-deswelling kinetics of T-DN hydrogels in response to cyclic environmental temperature change in the 20~50 °C range in DI water.