Supporting Information

Facile and large scale in-situ synthesis of the thermal responsive fluorescent SiNPs/PNIPAM hydrogels

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Figure S1. The F-SiNPs/PNIPAM hydrogels prepared by scale-up polymerization, (a) 10 multiples, (b) 50 multiples, and (c) 100 multiples.



Figure S2. The XPS spectra of F-SiNPs (a) full scan, (b) N1s scan, (c) Si2p scan, (d) C1s scan, and (e) O1s scan.



Figure S3. The FT-IR spectra of (a) F-SiNPs/PNIPAM, (b) PNIPAM, and (c) F-SiNPs.



Figure S4. The SEM images show that the freeze-dried F-SiNPs/PNIPAM hydrogels.



Figure S5. The XPS spectra of F-SiNPs/PNIPAM composite hydrogels, (a) full scan, (b) N1s scan, (c) Si2p scan, (d) C1s scan, and (e) O1s scan.



Figure S6. The UV-vis spectrum of F-SiNPs/PNIPAM composite hydrogels.



Figure S7. The PL spectra of swelled F-SiNPs/PNIPAM hydrogels and the aqueous phase.