## Electronic supplementary information

## Poly(glycerol monomethacrylate)-encapsulated upconverting nanoparticles prepared by miniemulsion polymerization: Morphology, chemical stability, antifouling properties and toxicity evaluation

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Figure S1. UCNP@SIPO particle size distribution in chloroform at UCNP/SIPO ratio (a) 1:1, (b) 1:1.6 and (c) 1:2 w/w according to DLS.



Figure S2. RAFT miniemulsion polymerization of GMA in the presence of UCNPs.



Figure S3. <sup>1</sup>H NMR spectra of (a) GMA, (b) GMMA and (c) macroRAFT agent.



Figure S4. Time dependence of (a) GMA conversion and (b)  $\ln([M_0]/[M])$  to demonstrate kinetics of RAFT emulsion polymerization of GMA in the absence or presence of UCNP@SIPO particles.