

Supporting Information

Microfluidic formulation of curcumin loaded multi-responsive gelatin nanoparticles for anticancer therapy

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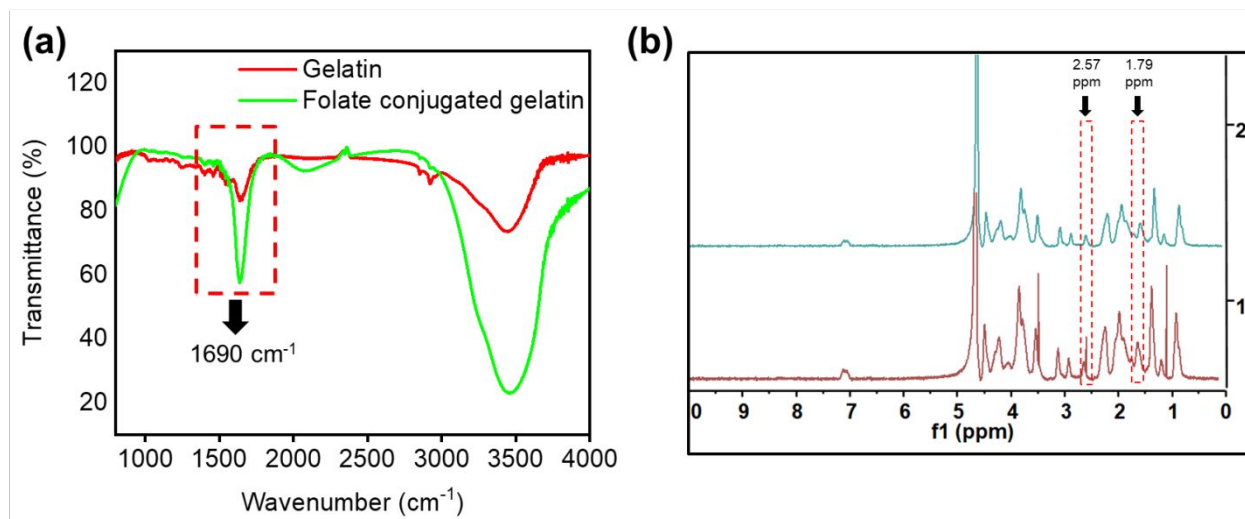


Figure S1. (a) FTIR spectra of gelatin (green) and folate conjugated gelatin (red). (b) ¹H NMR spectra of gelatin (A) and folate conjugated gelatin (B) in D₂O solvent.

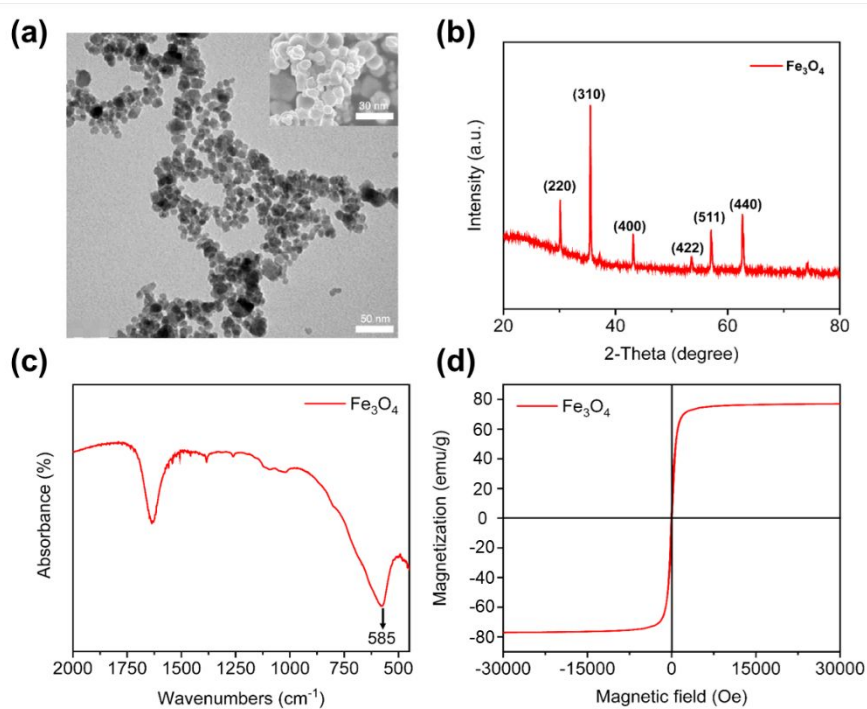


Figure S2. Characterization of Fe₃O₄ nanoparticles. (a) Transmission electron microscopy image of Fe₃O₄ with the SEM image inserted. **(b)** XRD patterns of Fe₃O₄. **(c)** FTIR spectrum of Fe₃O₄. **(d)** Magnetization curve of superparamagnetic Fe₃O₄ NPs.

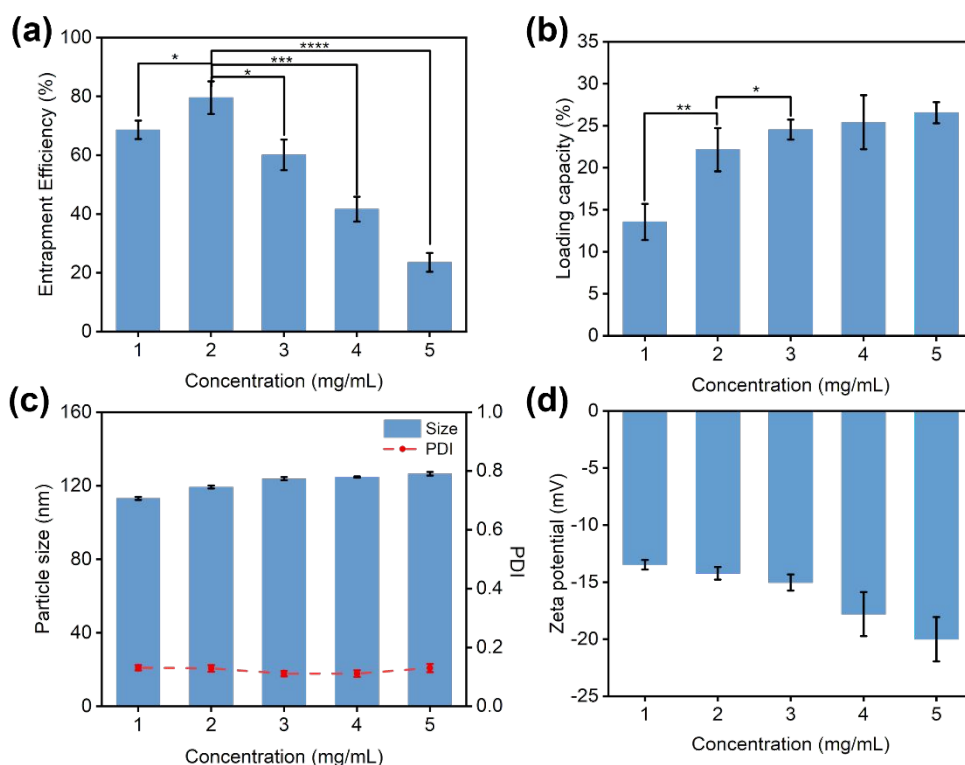


Figure S3. Effect of curcumin concentration on drug entrapment efficiency, particle size, PDI and Zeta potential. (a) EE%. **(b)** LC %. **(c)** Particle size and PDI. **(d)** Zeta potential.

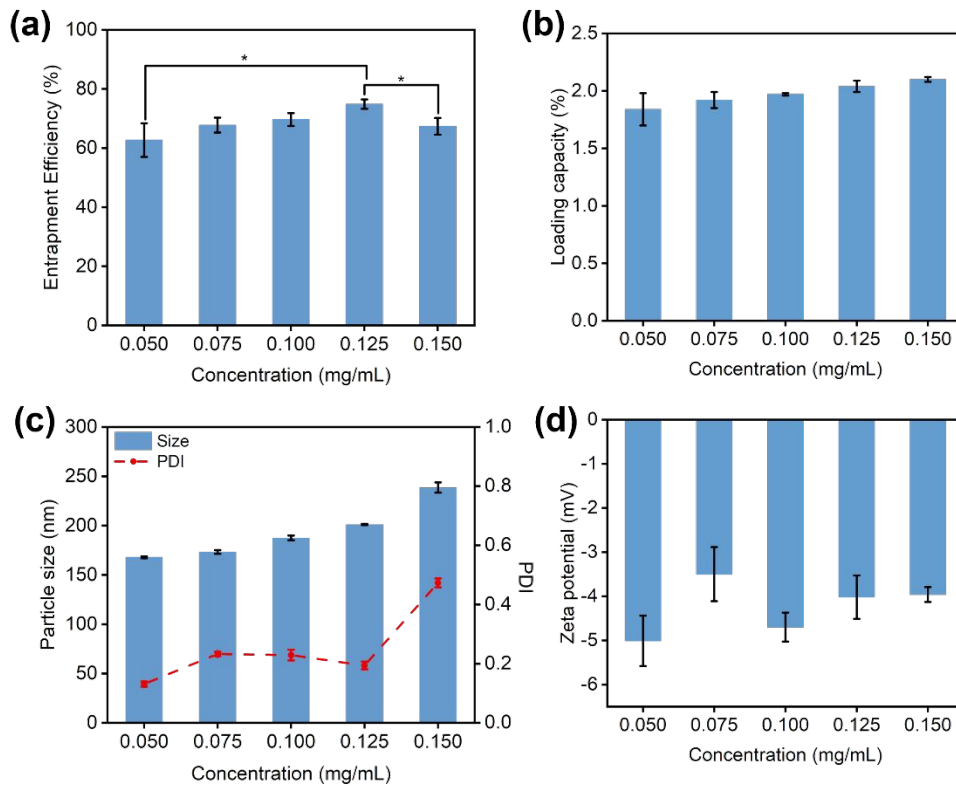


Figure S4. Effect of CuS concentration on CuS entrapment efficiency, particle size, PDI and Zeta potential. (a) EE%. (b) LC %. (c) Particle size and PDI. (d) Zeta potential.

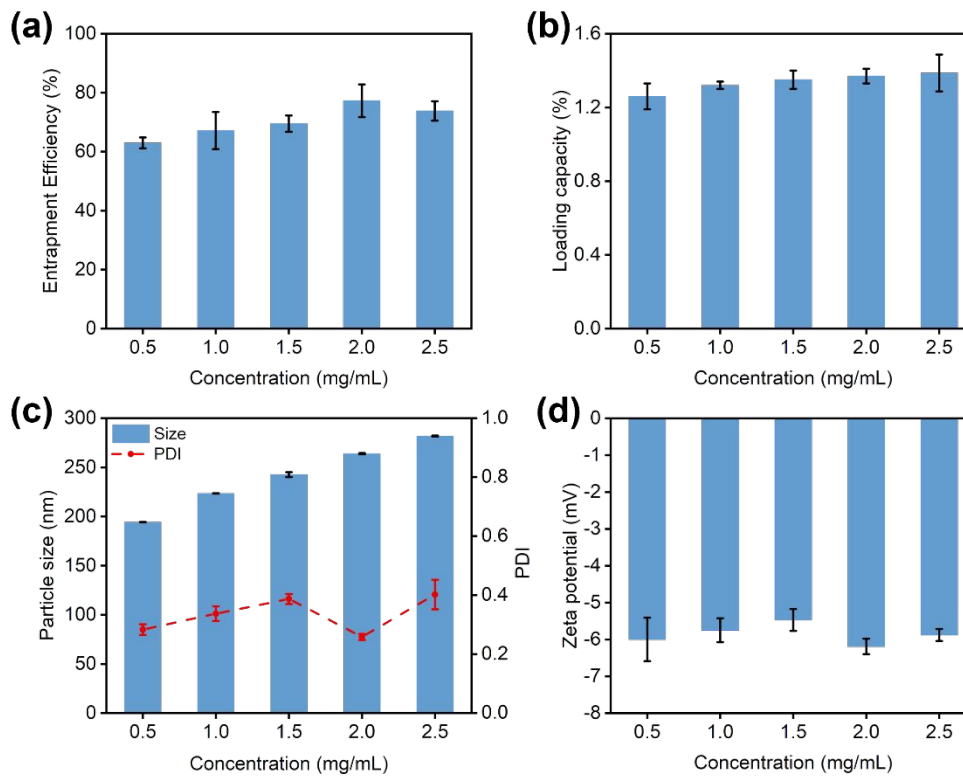


Figure S5. Effect of Fe₃O₄ concentration on Fe₃O₄ entrapment efficiency, particle size, PDI and Zeta potential. (a) EE%. (b) LC %. (c) Particle size and PDI. (d) Zeta potential.

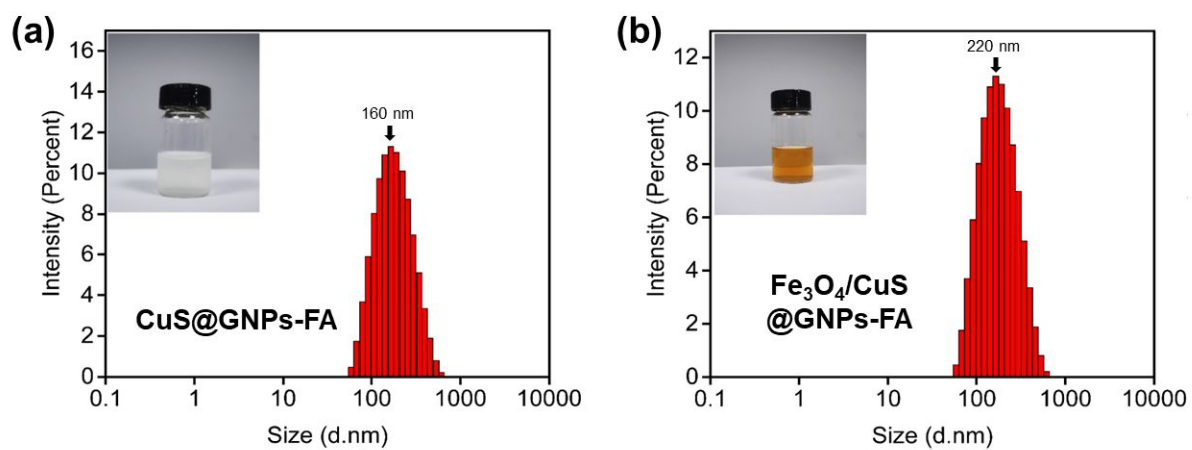


Figure S6. Size distribution of (a) CuS@GNPs-FA and (b) Fe₃O₄/CuS@GNPs-FA.