

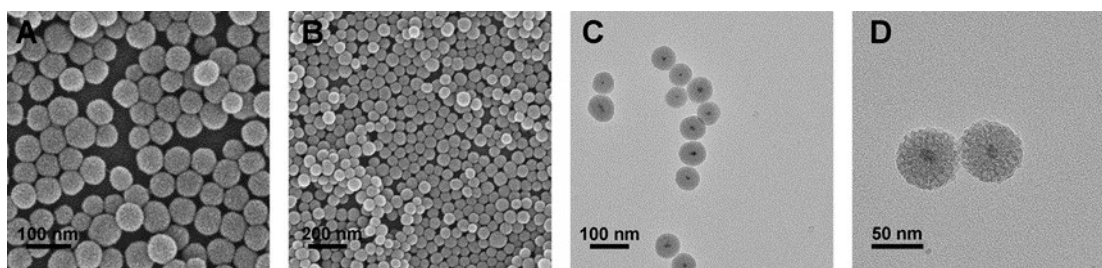
## Supporting Information

### Cap-Free dual Stimuli-Responsive Biodegradable Nanocarrier for Controlled Drug Release and Chemo-Photothermal Therapy †

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**Figure S1.** (A-B) SEM images and (C-D) TEM images of MDBCP.

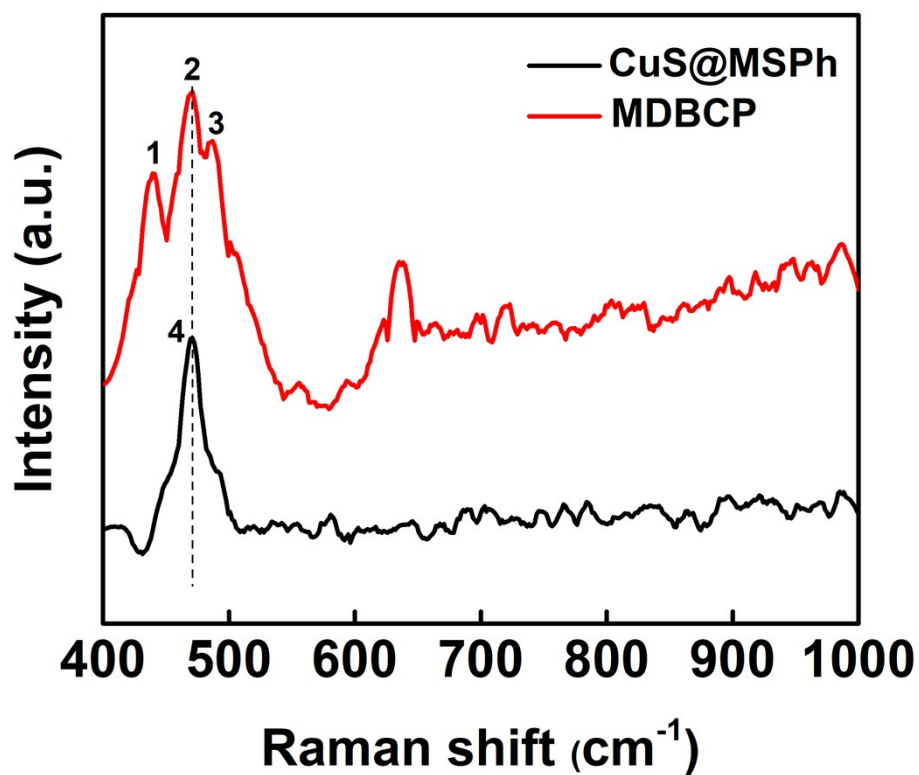
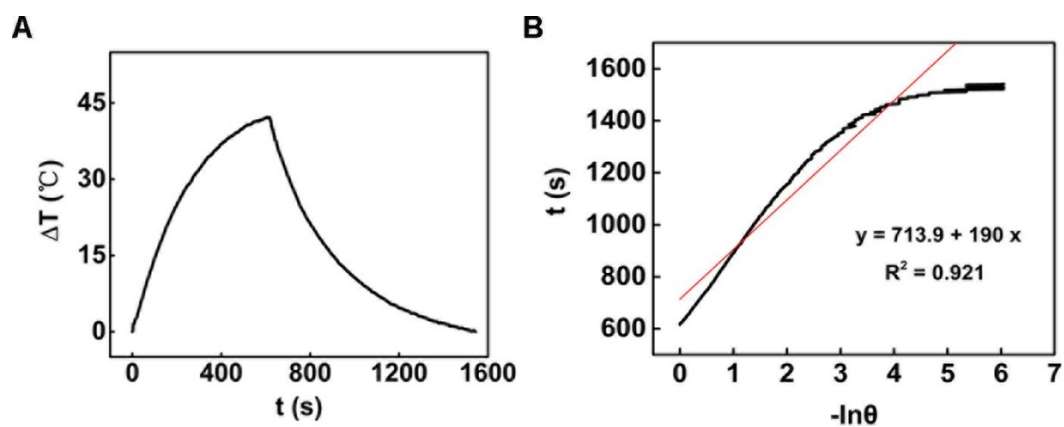
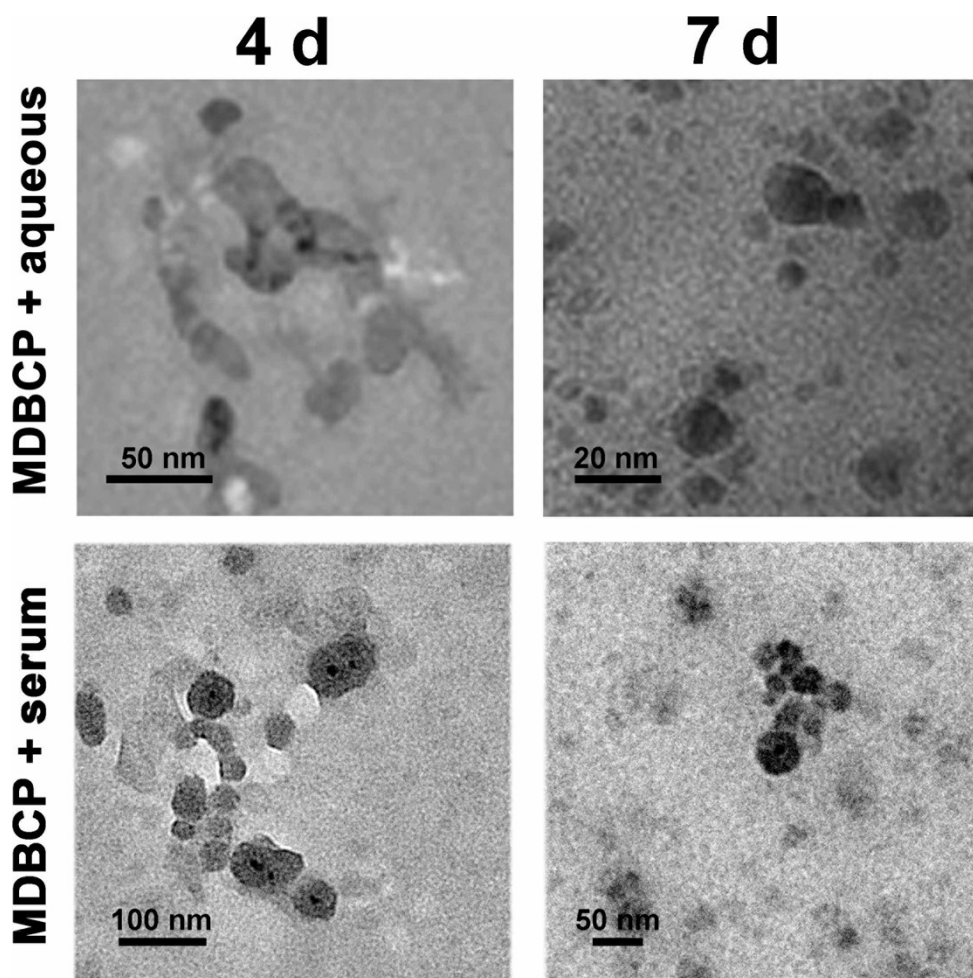


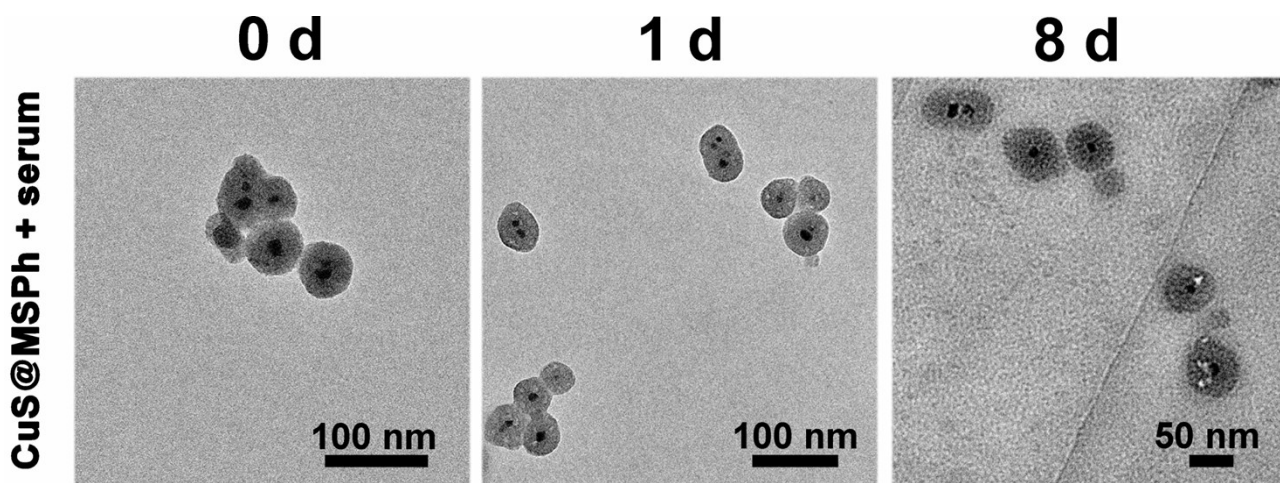
Figure S2. Raman spectra of CuS@MSPh and MDBCP.



**Figure S3.** (A) A single NIR-laser on/off cycle of MDBCP. (B) cooling period vs negative natural logarithm of driving force temperature. The photothermal conversion efficiency ( $\eta$  value) of MDBCP is calculated according to the previous report.



**Figure S4.** The TEM images of MDBCP stirred in 10 mM GSH (aqueous solution or serum solution) at 37 °C at different time.



**Figure S5.** The TEM images of CuS@MSPh stirred in 10 mM GSH serum solution at 37 °C at different time.