Supplementary Information (SI) for RSC Advances.
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A novel copper-based nanosystem for augmented breast cancer photothermal and chemodynamic therapy

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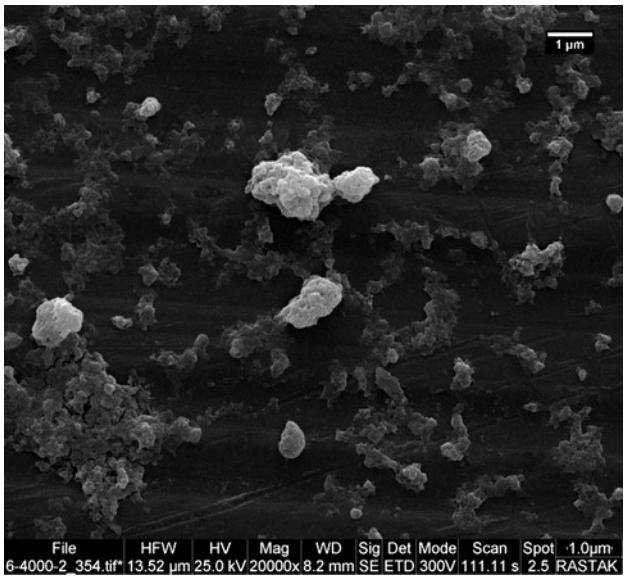

Fig. S1 SEM image of DL-Cu-Cys After incubation with H_2O_2

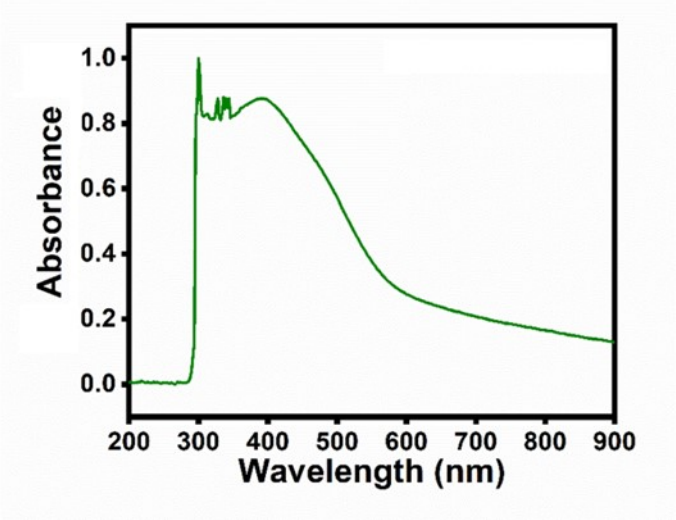

Fig. S2 UV.vis spectrum of DL-Cu-Cys after incubation with H_2O_2

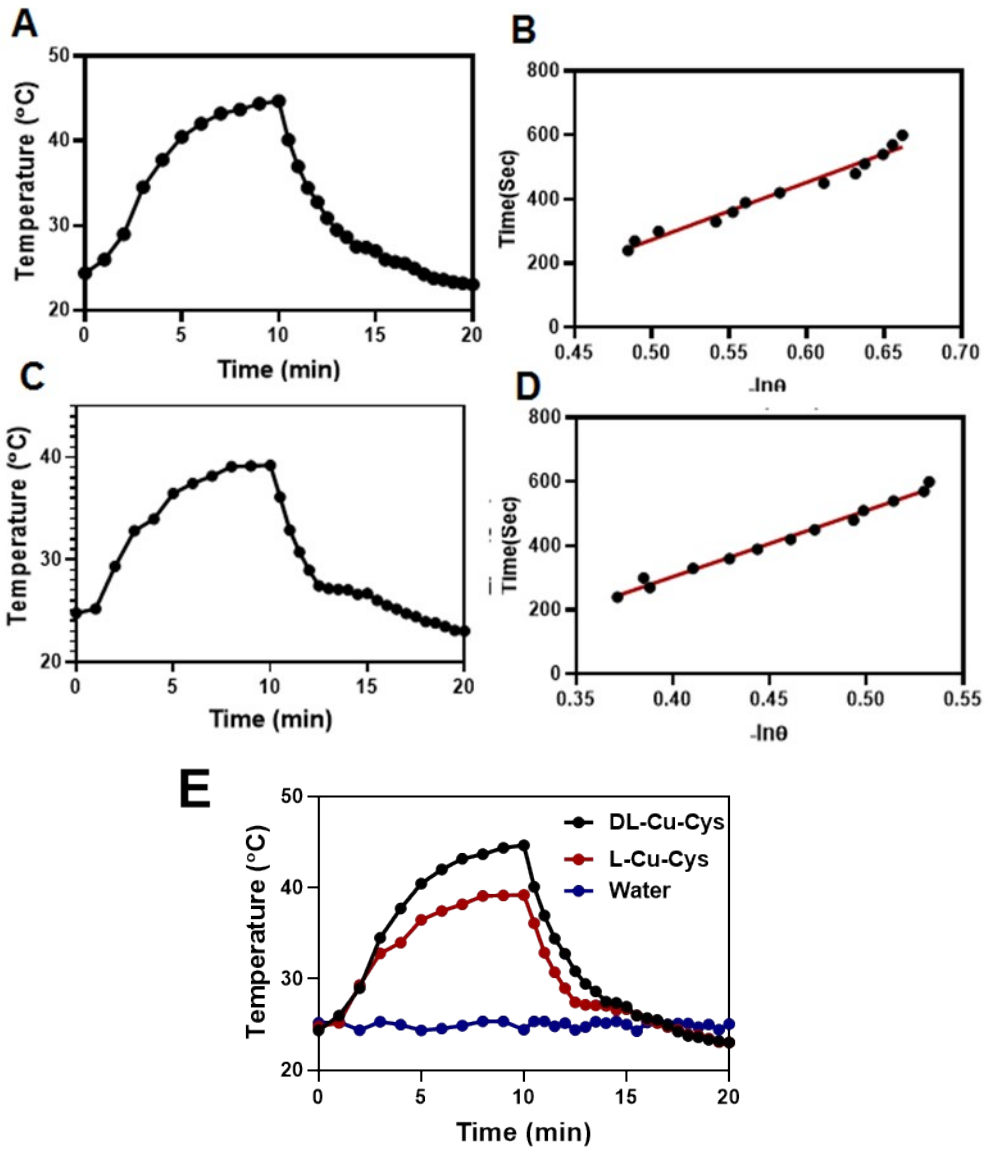

Fig. S3 (A) The photo thermal response of the DL-Cu-Cys with a NIR laser (808 nm, 1.5 w cm^{-2}) for 10 min and the cooling phase of 10 min. **(B)** Linear time data *versus* $-Ln\theta$ measured by the cooling period of Figure 4A and **(C)** The photo thermal response of the L-Cu-Cys with a NIR laser (808 nm, 1.5 w cm^{-2}) for 10 min and the cooling phase of 10 min. **(D)** Linear time data *versus* $-Ln\theta$ measured by the cooling period of Figure 4c (**E**) Temperature curves of DL-Cu-Cys, L-Cu-Cys NPs, and water (808 nm, 1.5 W cm^{-2}).

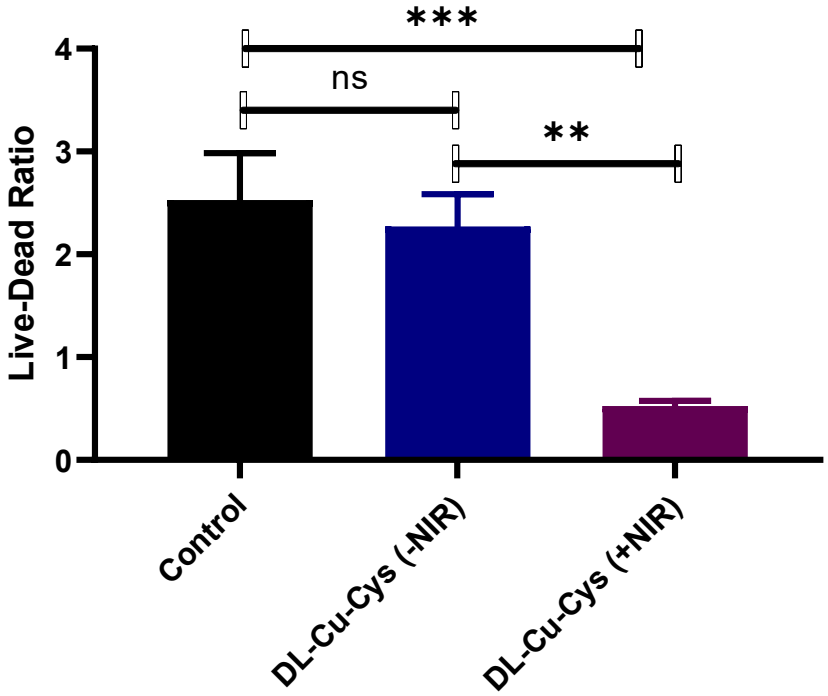

Fig. S4 The live/dead ratio in each groups was quantified. Data are expressed as mean ± SD of three independent replicates. Significant differences are marked with ** $p<0.01$ and *** $p<0.001$.

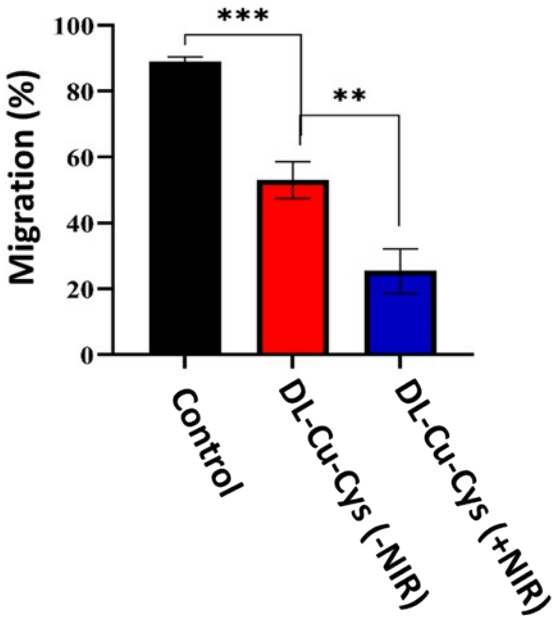

Fig. S5 The percentage of migrated cells in each groups was quantified. Data are expressed as mean ± SD of three independent replicates. Significant differences are marked with ** $p<0.01$ and *** $p<0.001$.

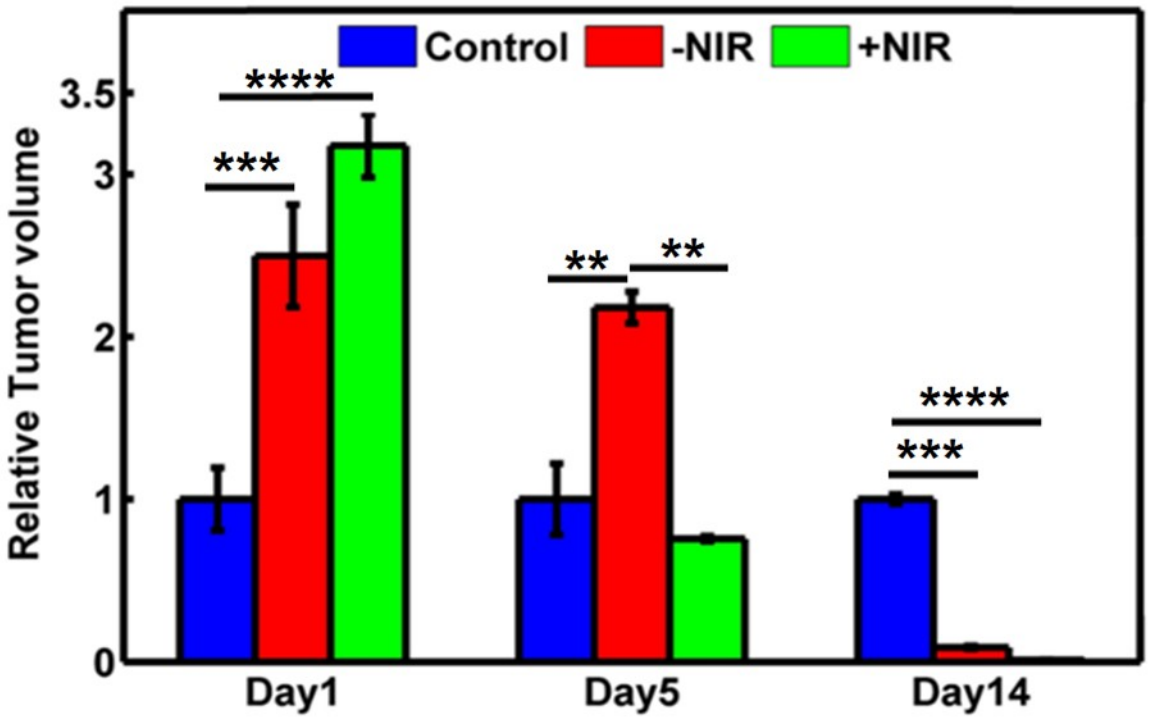

Fig. S6 Monitoring assay for the change of tumor volume (mm^3) over 14 days. Significant differences are marked with ** $p<0.01$ and *** $p<0.001$, and ****$p < 0.0001$.

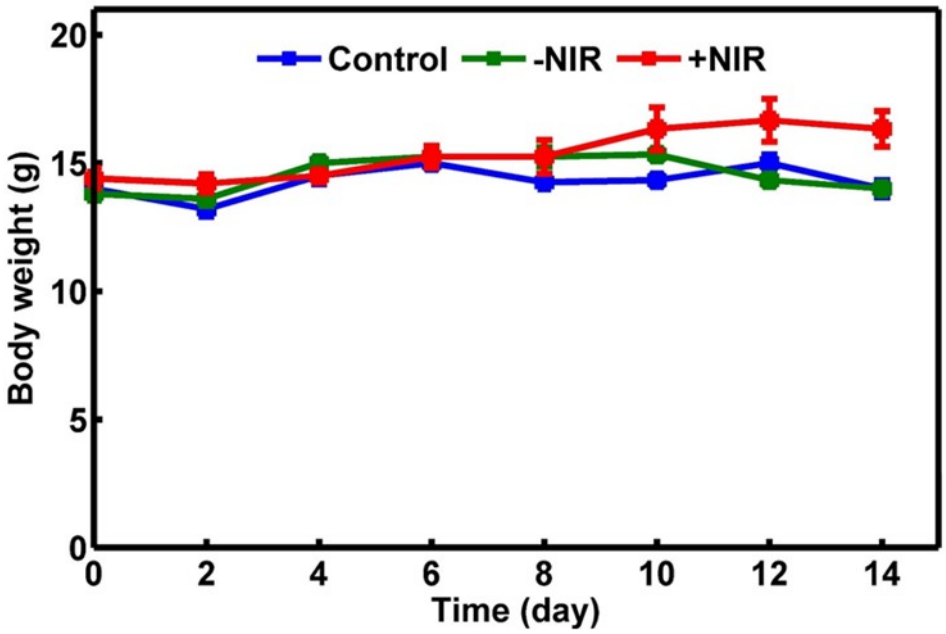

Fig. S7 The measurement of the change of body weight over 14 days**.**