Supplementary material for:
A Near-Infrared Light Triggered Composite Nanoplatform for Synergetic Therapy and Multimodal Tumor Imaging

Figure 1. Particle size distribution of the CSMS-PEG suspension in PBS.

Figure 2. (a-c) TEM images of CSMS nanoflowers. (d) Size distribution histogram of Cu$_{7.2}$S$_4$ nanoparticles according to TEM images.
Figure 3. XRD pattern of the MoS$_2$ (0.58Mo0Cu), Cu$_7$S$_4$/5MoS$_2$ (0.58Mo1.2Cu) and Cu$_7$S$_4$/CuS (0Mo1.2Cu).

Figure 4. SEM images of the CSMS-PEG prepared with (a) 0.58Mo1.6Cu; (b) 0.58Mo1.2Cu; (c) 0.58Mo0.8Cu; (d) 0.44Mo1.2Cu and (e) 0.29Mo1.2Cu.
Figure 5. Temperature elevation of the CSMS-PEG CNFs prepared in 200 °C for 8, 12, 20 and 24 h under the irradiation of 808 nm laser (1.0 W cm$^{-2}$) versus time, respectively.

![Graph showing temperature elevation over time](image)

Figure 6. (a) FT-IR spectrum and (b) TG curve of the CSMS-PEG.

![FT-IR spectrum and TG curve](image)

Figure 7. (a) UV-vis-NIR diffraction spectra of CSMS-PEG with 20, 40, 60, 80, and 100μg mL$^{-1}$.

![UV-vis-NIR diffraction spectra](image)
respectively; (b) Absorbance value at 808 nm versus the aqueous dispersion concentration of CSMS-PEG ($R^2=0.9997$).

**Figure 8.** Photos of CSMS-PEG suspension in (a) saline; (b) PBS and (c) DMEM after standing for 48 hours.

**Figure 9.** Relative viabilities of tumor cells after incubation with different $\text{H}_2\text{O}_2$ concentration (0, 25, 50, 75, 100, 150 and 200 $\mu$g mL$^{-1}$).