## **Electronic supporting information**

A porous material excited by near-infrared light for photo/chemodynamic and photothermal dual-mode synergistic therapy

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Fig. S1 The XRD of SiO<sub>2</sub> NT.



Fig. S2 The TEM image of CNT (a) and SiO<sub>2</sub> NT (b). The HRTEM image of SiO<sub>2</sub> NT

(c).



**Fig. S3** (a) The zeta potential of each step material. (b) The stability of SiO<sub>2</sub>@CuO NT at room temperature.



**Fig. S4** (a) The UV-*vis* spectrum of RhB with SiO<sub>2</sub>@CuO NT under 808 nm lasers irradiation for diverse time points. (b) The absorption intensity changes of RhB at different temperatures for a time extension. (c) The degradation efficiencies of RhB under different experimental conditions. (d) The degradation efficiencies of RhB in different scavenger solutions. In all solutions containing  $H_2O_2$ , the amount of  $H_2O_2$  added is 0.384 wt%.



Fig. S5 Cellular uptake of SiO<sub>2</sub>@CuO–FITC nanocomposite. All the scale labels are 100  $\mu$ m.



Fig. S6 H&E-stained CLSM images of tumors and major organs in four groups. All the scale labels are 20  $\mu$ m.



Fig. S7 Biodistribution of SiO<sub>2</sub>@CuO NT in mice characterized by the concentration of Cu (n = 5).