

## Supporting Information

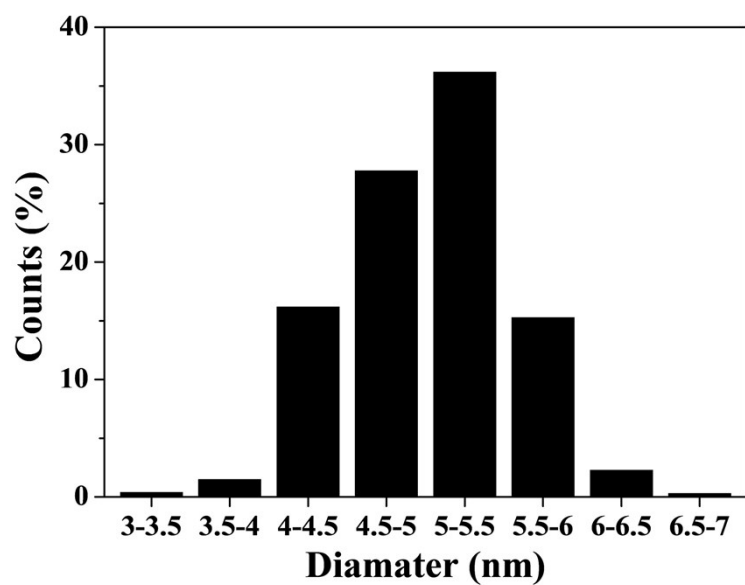
### **Doxorubicin Loaded Cu<sub>2</sub>S/Tween-20 Nanocomposites for Light Triggered Tumor Photothermal Therapy and Chemotherapy**

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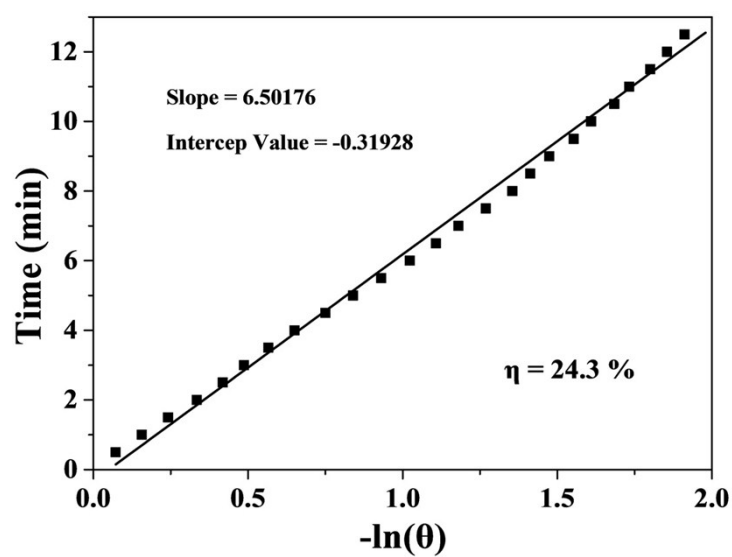
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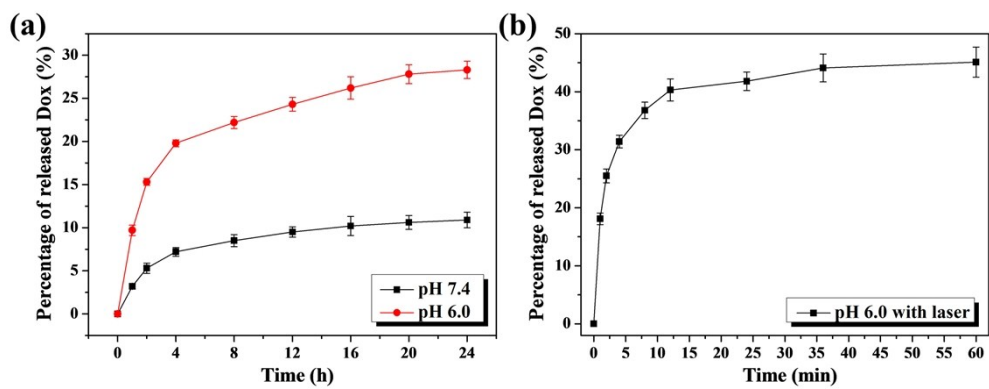
#These authors contribute equally.



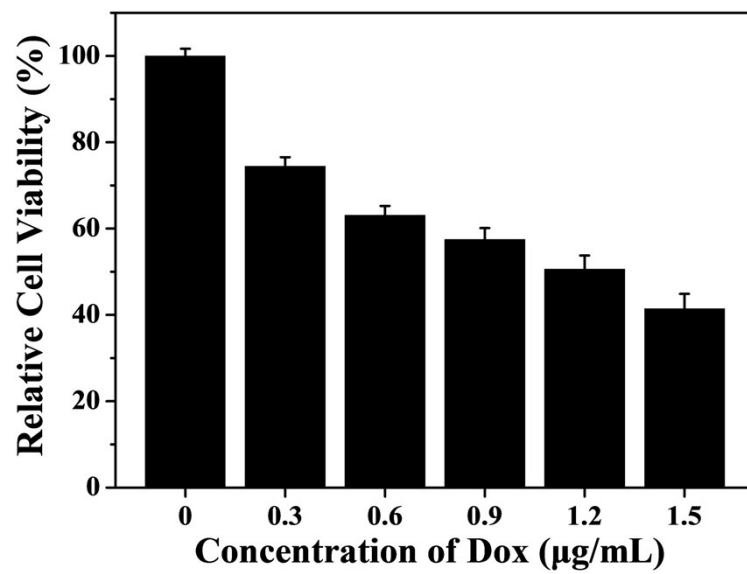
**Figure S1.** The size distribution of Cu<sub>2</sub>S/Dox@Tw20 NPs measured from TEM photos.



**Figure S2.** Time constant for heat transfer of  $\text{Cu}_2\text{S}/\text{Dox}@\text{Tw}20$  NPs is determined by applying the linear time data from the cooling period versus negative natural logarithm of driving force temperature. Based on this, the photothermal conversion efficiency was calculated as 24.3 %.



**Figure S3.** (a) Drug release curves of Dox under different pH environment. (b) Drug release curve of Dox under laser treatment at the pH of 6.0.



**Figure S4.** KB cells were mixed with Dox at different concentrations of 0, 0.3, 0.6, 0.9, 1.2 and 1.5 µg/mL for 24 min, and then the relative cell viabilities are estimated through CCK-8 assay.