

## Electronic Supplementary Information

### Facile and One-pot Synthesis of Fe<sub>3</sub>O<sub>4</sub>@chitosan Nanospheres for MRI and Fluorescence Imaging Guided Chemo-photothermal Combinational Therapy of Cancer

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#### Supplementary Figures

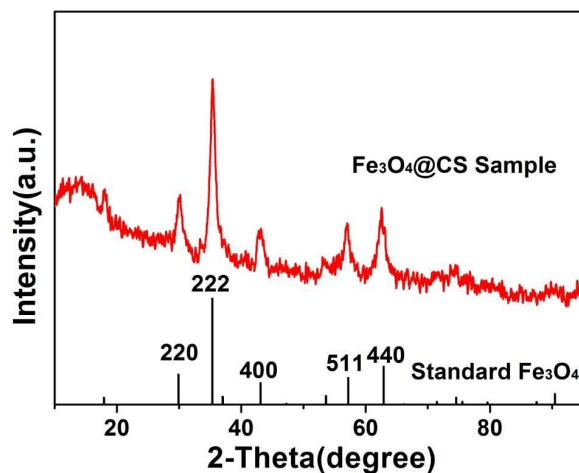
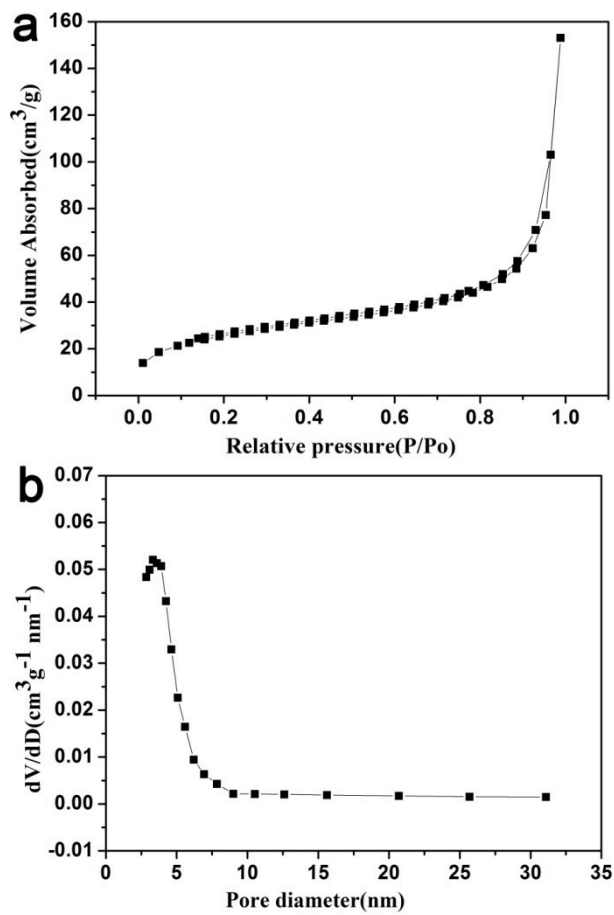
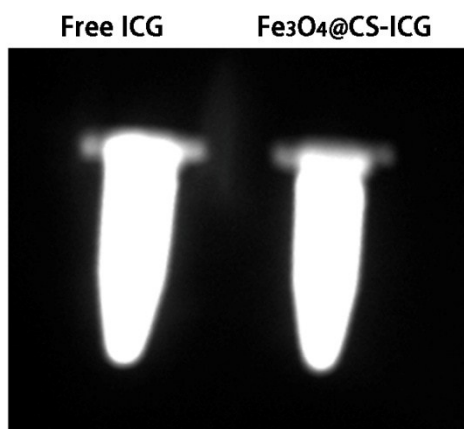


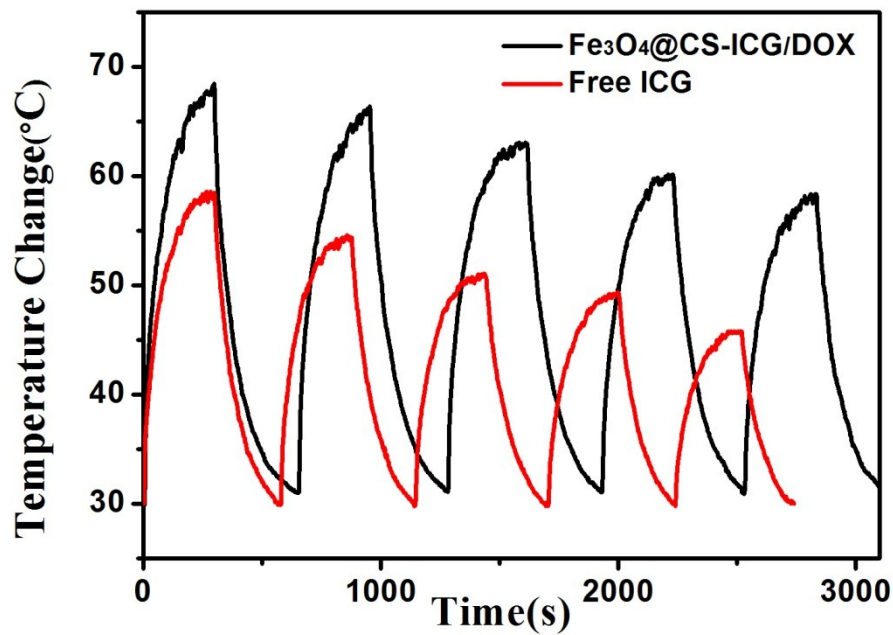
Fig.S1 XRD pattern of Fe<sub>3</sub>O<sub>4</sub>@CS nanospheres.



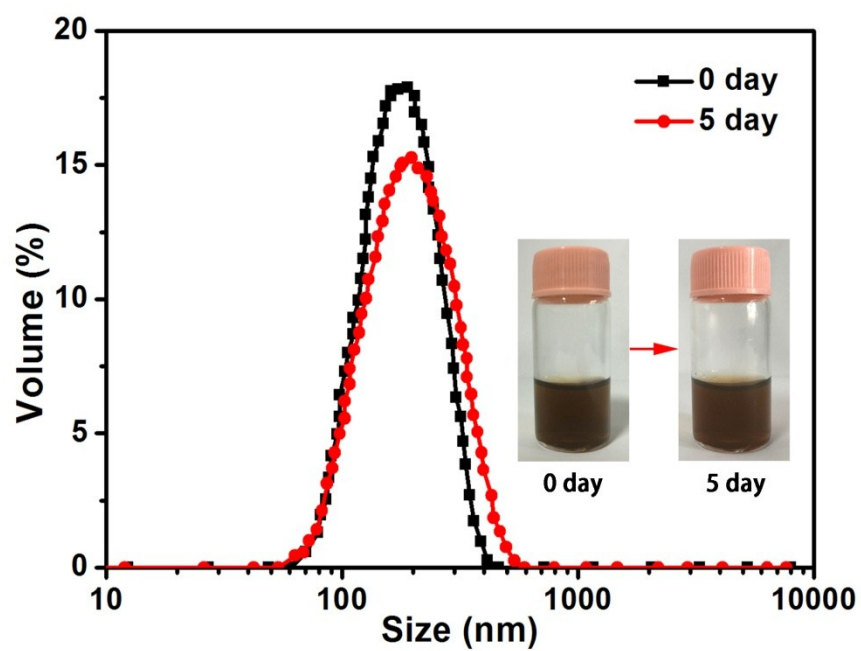
**Fig.S2** (a) N<sub>2</sub> adsorption-desorption isotherms and (b) pore size diameter distribution of Fe<sub>3</sub>O<sub>4</sub>@CS nanospheres.



**Fig.S3** NIR fluorescence images of free ICG and Fe<sub>3</sub>O<sub>4</sub>@CS-ICG nanocomposites solution.

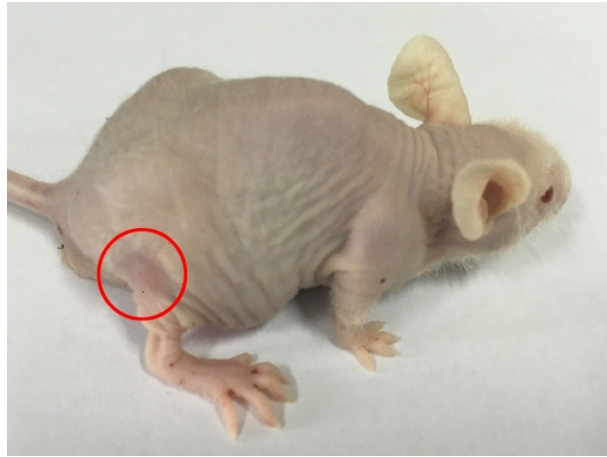


**Fig.S4** The temperature changes of Fe<sub>3</sub>O<sub>4</sub>@CS-ICG/DOX nanocomposites and free ICG solution over five ON/OFF cycles of 808 nm laser irradiation.



**Fig.S5** Fe<sub>3</sub>O<sub>4</sub>@CS-ICG/DOX nanocomposites size distribution after placed for 0 and 5 days.

(Inset: Photographs of Fe<sub>3</sub>O<sub>4</sub>@CS-ICG/DOX nanocomposites solution).



**Fig.S6** Photo of  $\text{Fe}_3\text{O}_4@CS\text{-ICG/DOX+NIR}$  group mice after 30 d treatments, the tumor location was marked with red circle.