

Tumor-triggered drug release from calcium carbonate-encapsulated gold nanostars for near-infrared photodynamic/photothermal combination antitumor therapy

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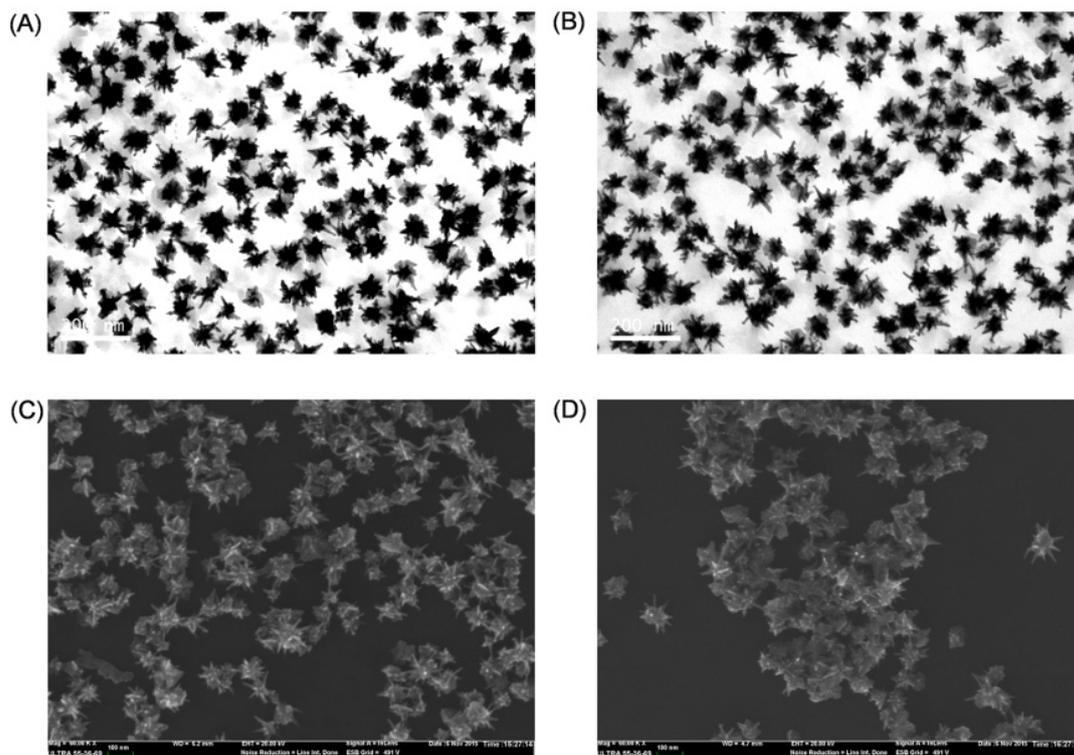


Figure S1. Characterization of GNS and GNS@CaCO₃/ICG. TEM images of GNS (A) and GNS@CaCO₃/ICG (B). SEM images of GNS (C) and GNS@CaCO₃/ICG (D).

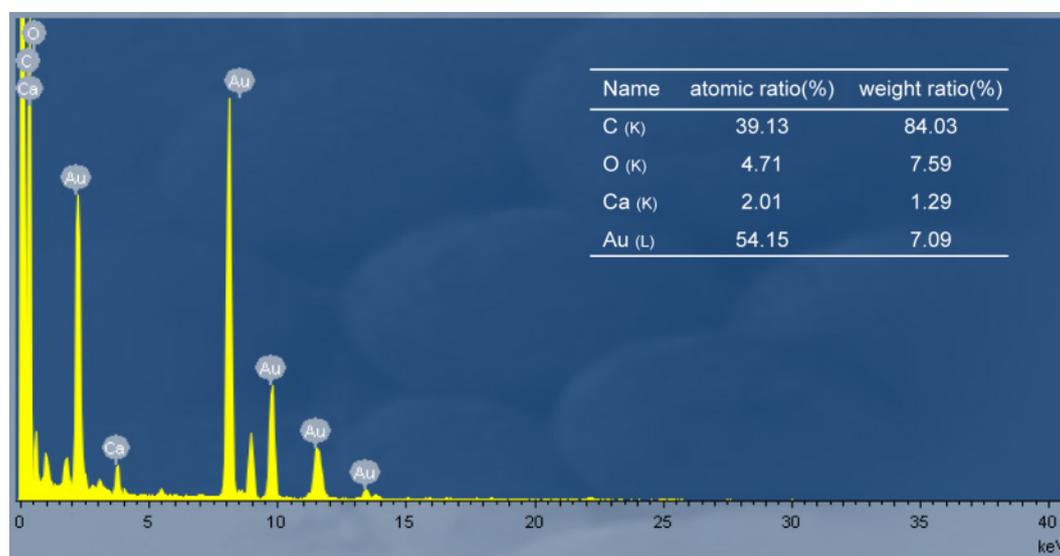


Figure S2. Energy-dispersive X-ray spectroscopy of GNS@CaCO₃/ICG by TEM.

	GNS	GNS@CaCO ₃ /ICG
Zeta Potential (mV)	- 31.72 ± 2.36	- 20.97 ± 1.56

Figure S3. Zeta potential of GNS and GNS@CaCO₃/ICG.

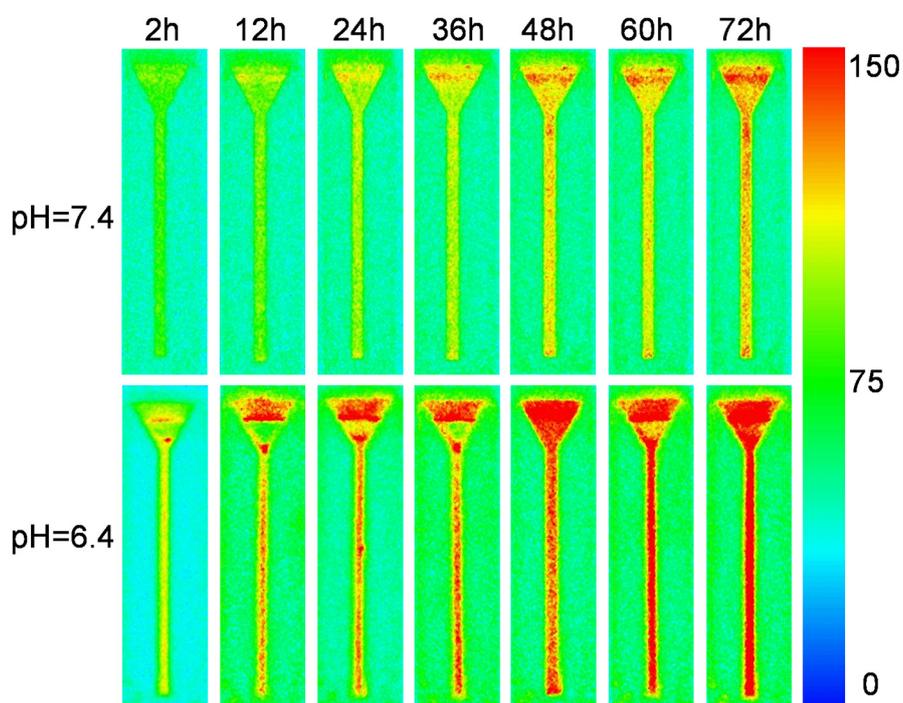


Figure S4. Fluorescence images of the released-ICG from GNS@CaCO₃/ICG at different pH values (excitation: 710 nm; emission: 790 nm; integration time: 30 s).

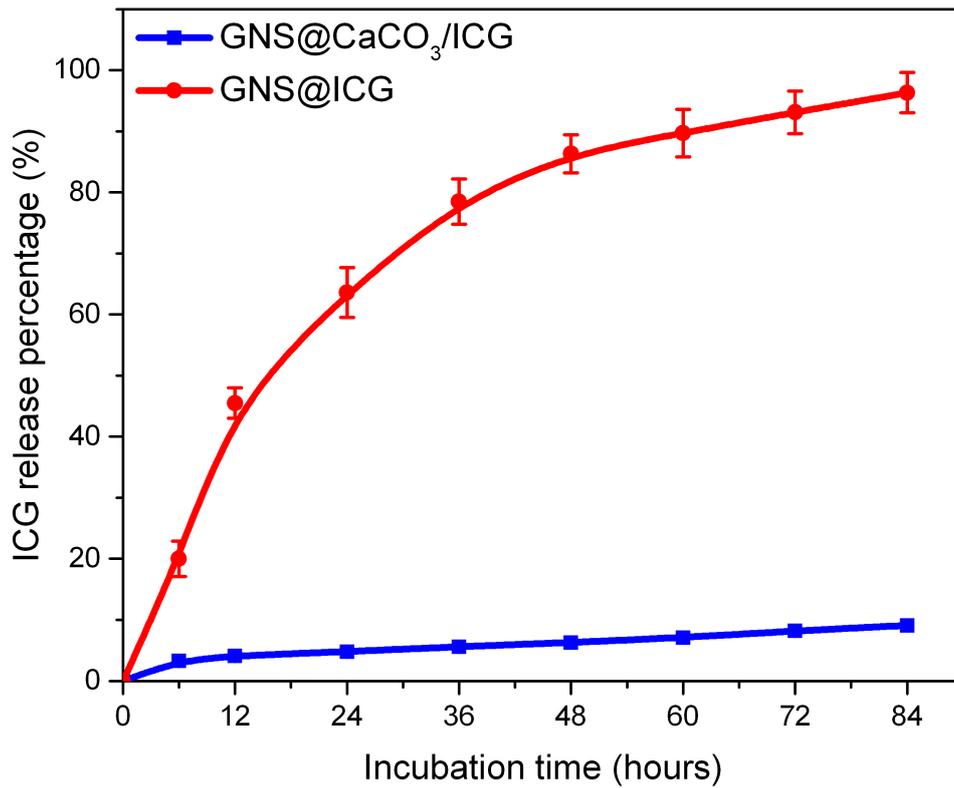


Figure S5. Time course of ICG release from GNS@ICG and GNS@CaCO₃/ICG at physiological pH value (7.4).

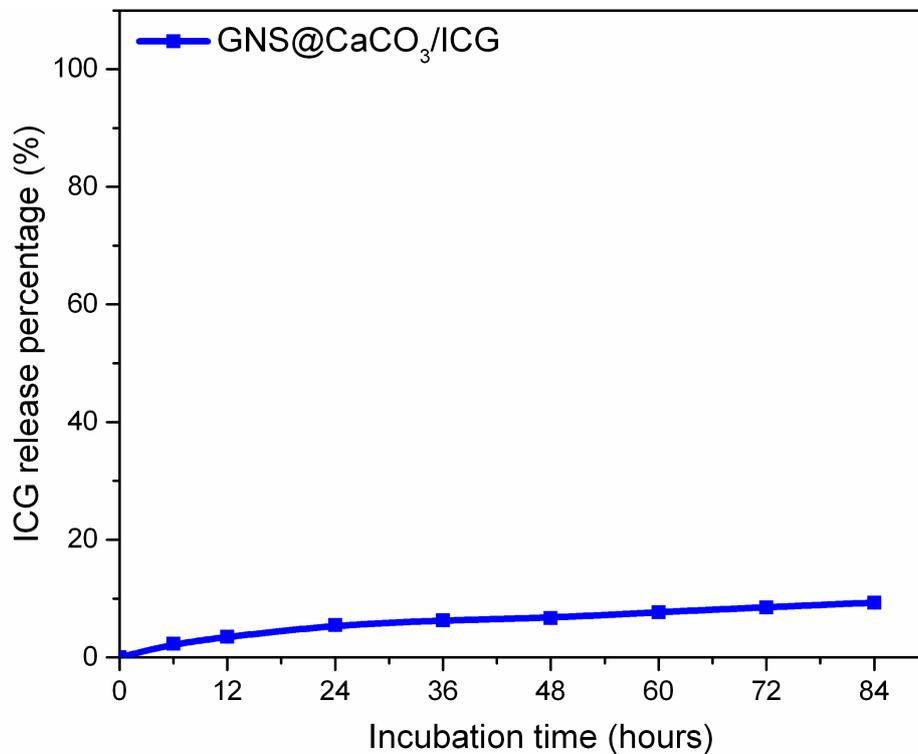


Fig S6. Time course of ICG release from GNS@ICG and GNS@CaCO₃/ICG in serum-containing medium.

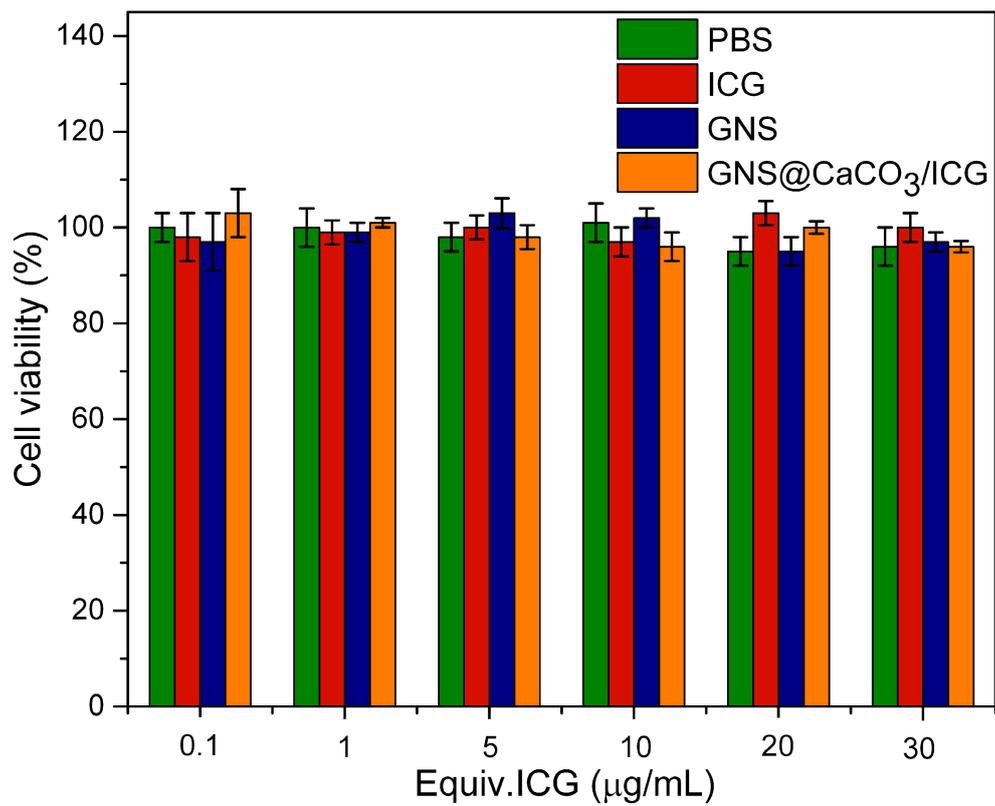


Figure S7. Relative cell viability of MGC803 cells incubated with different concentrations of free ICG, GNS and GNS@CaCO₃/ICG for 24 h.

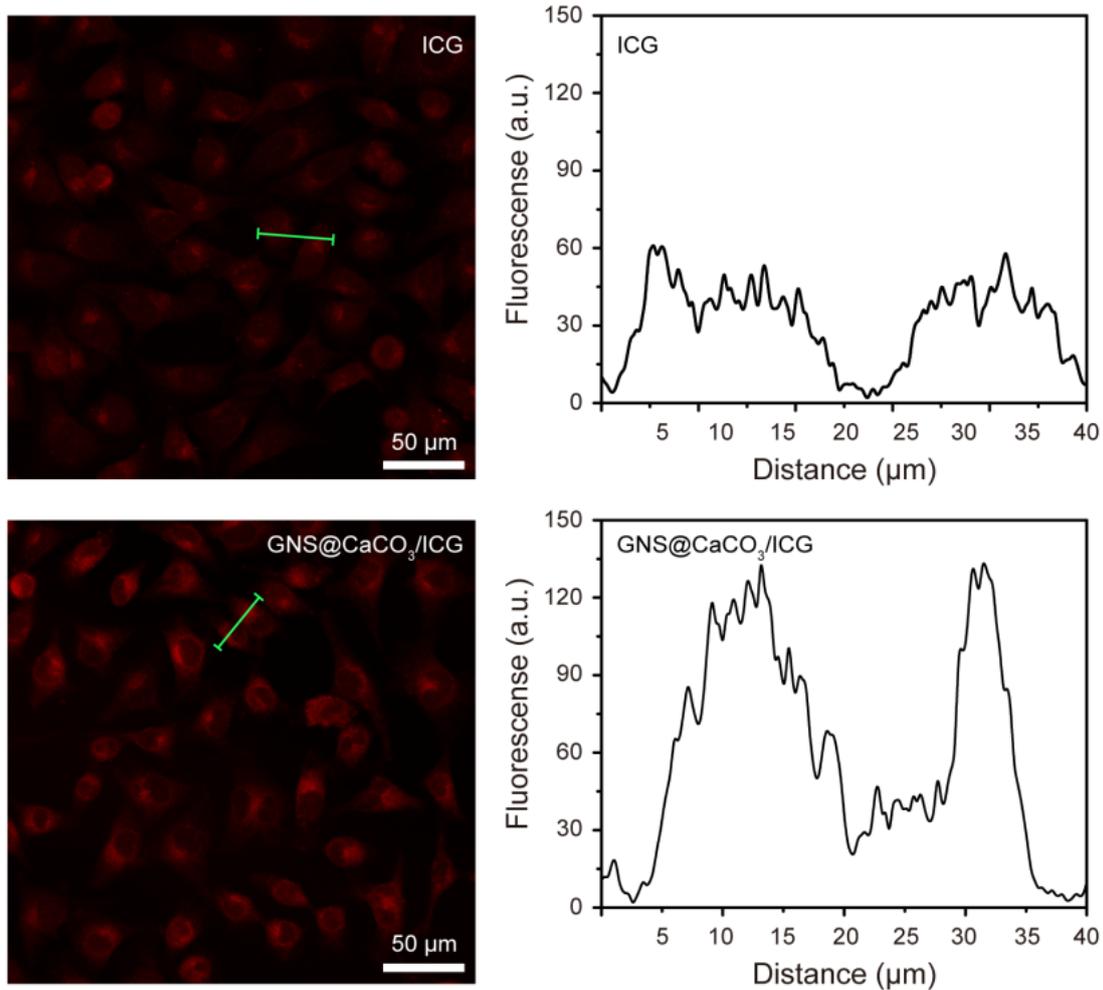


Figure S8. Fluorescence images and intensity curves of MGC803 cells treated with free ICG (20 $\mu\text{g}/\text{mL}$) and GNS@CaCO₃/ICG (equivalent 20 $\mu\text{g}/\text{mL}$ ICG) for 12 h.

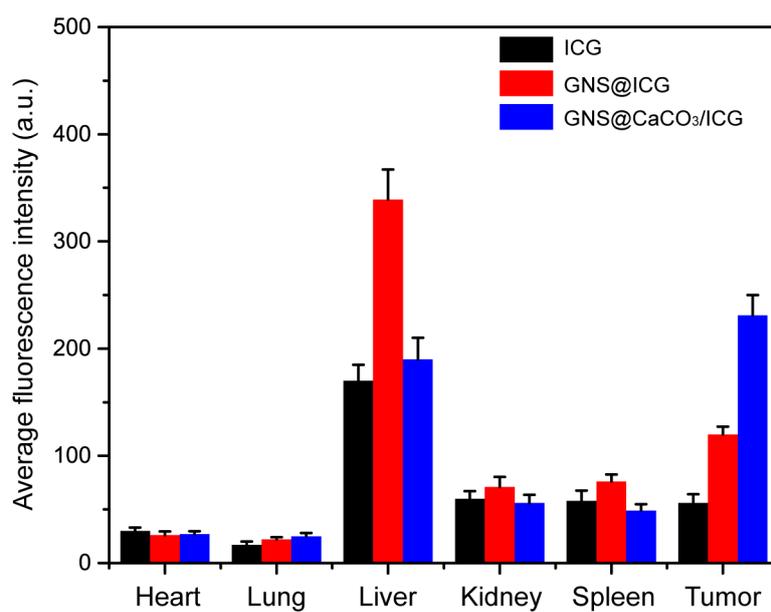


Figure S9. Quantified fluorescence signals from organs and tumors.

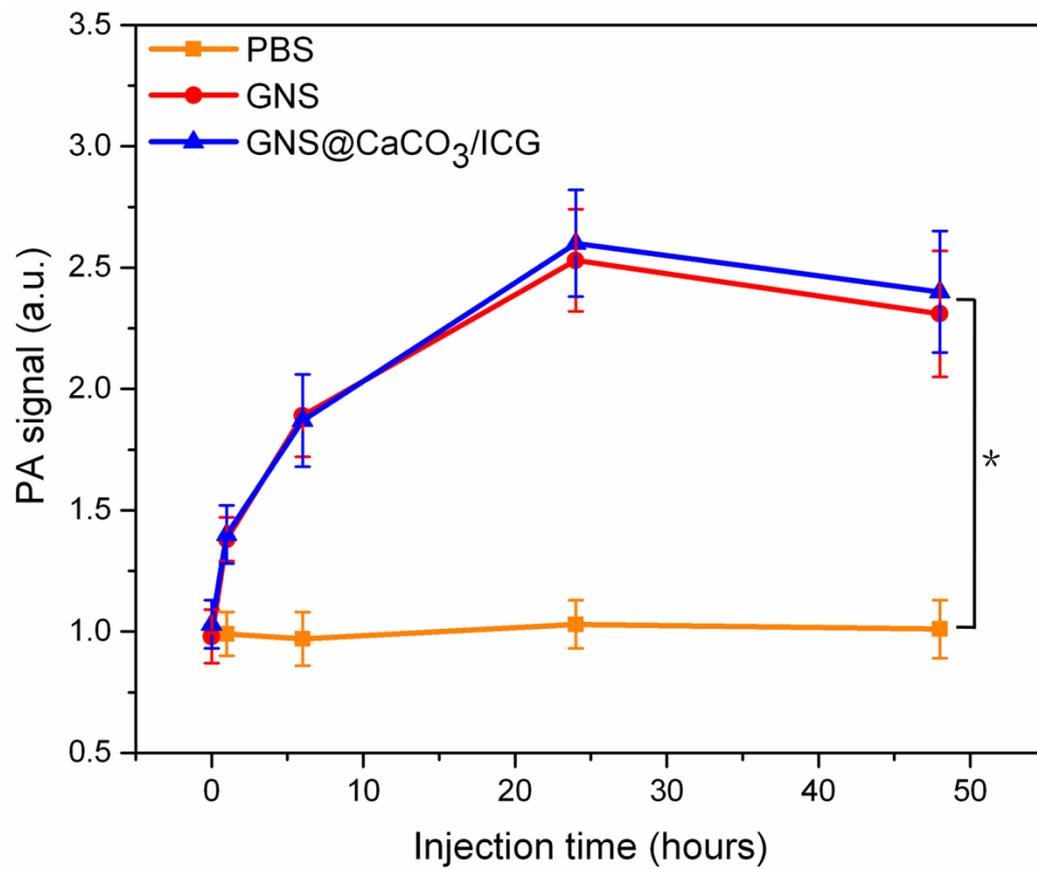


Figure S10. Quantified PA signals from blood vessels (n=5, * $p < 0.5$).