Timely-Coordinated Phototherapy Mediated by Mesoporous Organosilica Coated Triangular Gold Nanoprism

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Figure S1. TEM images of unpurified TGP obtained by controlling the NaOH concentration at (A) 33.33 μ M, (B) 25 μ M, (C) 16.67 μ M, (D) 8.33 μ M.



Figure S2. UV-vis spectra of unpurified TGP obtained by controlling the NaOH concentration at (a) 33.33 μ M, (b) 25 μ M, (c) 16.67 μ M, (d) 8.33 μ M.



Figure S3. (A) UV-vis spectra and (B) photograph of unpurified TGP, byproducts and TGP.(C) TEM of purified TGP (scale bar: 50 nm). (D) Frequency distribution of TGP side length measured from TEM images (n = 200).



Figure S4. (A) DLS (based on log intensity method) of TGP and TGP@MOS. The raw intensity of DLS distribution of (B) TGP and (C) TGP@MOS.



Figure S5. (A) Zeta potential of TGP and TGP@MOS. (B) Normalized UV-vis spectra of TGP and TGP@MOS.



Figure S6. (A) Zeta potential and (B) DLS of TGP@MOS and TGP@MOS-ZnPc.



Figure S7. ZnPc release curves of TGP@MOS-ZnPc and TGP@MSN-ZnPc in (A) ultrapure water and (B) PBS.



Figure S8. (A) DLS of TGP@MOS-ZnPc dispersed in ultrapure water and cell culture medium MEM with 10% FBS for 60 h. UV-vis spectra of TGP@MOS-ZnPc dispersed in (B) PBS and (C) PBS with 10% FBS for 60 h.



Figure S9. SOSG fluorescence spectra of (A) ZnPc (2.2 μg ml⁻¹) and (B) TGP@MOS-ZnPc (containing ZnPc 2.2 μg ml⁻¹ and TGP@MOS 18.75 μg ml⁻¹) during irradiation (660 nm, 1.0 W cm⁻²). (C) SOSG fluorescence intensity of ZnPc, TGP@MOS-ZnPc, TGP@MOS and water after irradiation for 7min.



Figure S10. Infrared thermal images of ultrapure water and TGP@MOS-ZnPc at different concentrations during 10 min irradiation (660 nm, 1.0 W cm⁻²).



Figure S11. Relative viability of MDA-MB-231/Luc cells incubated with (A) ZnPc, (B) TGP@MOS and (C) TGP@MOS-ZnPc and irradiated (660 nm, 1.0 W cm⁻²⁾ for different time durations.



Figure S12. Statistical analysis of the (A) relative tumor signal and (B) relative tumor volume on day 14 posttreatment (asterisks: p < 0.05).



Figure S13. Representative photograph of (A) mice and (B) resected tumors on day 14 posttreatment.



Figure S14. Percentage of red blood cell hemolysis after incubated with TGP@MOS-ZnPc at different concentrations (corresponding to 0, 10, 31.2, 62.5, 125, 250, 500 and 1000 μ g ml⁻¹ of TGP@MOS).