Electronic Supplementary Information (ESI)

Platinum nanoparticles anchored metal-organic complex nanospheres by a coordination-crystallization approach for enhanced sonodynamic therapy of tumor

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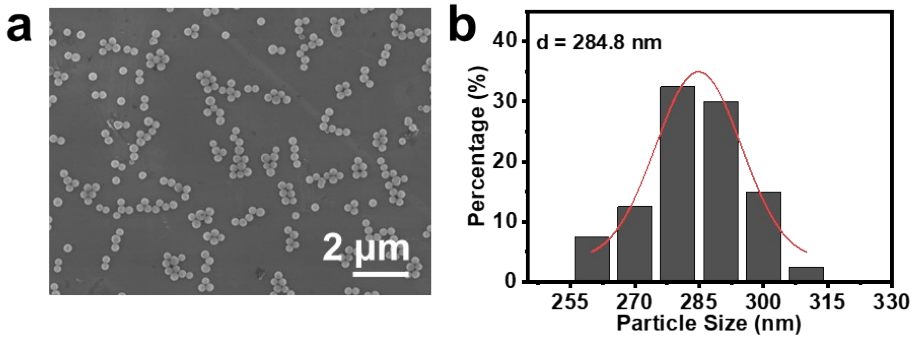

Fig. S1 SEM image and histogram displaying the size distribution of the Pt-MOCs. (a) Low magnification SEM image of the Pt-MOCs. (b) A histogram displaying the particle size distribution of the Pt-MOCs.

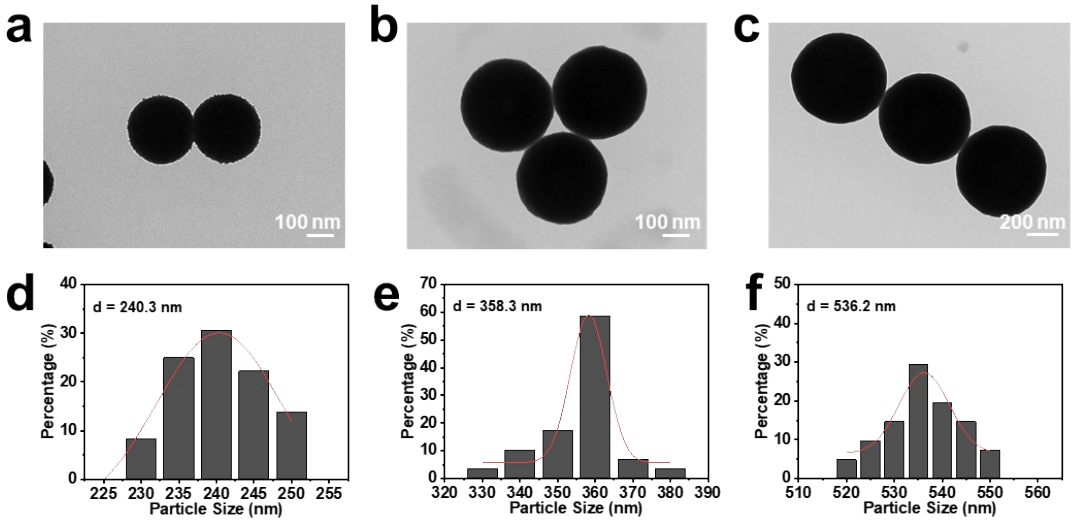

Fig. S2 TEM images and histograms showing particle size distribution of Pt-MOCs prepared at DSF dosage of (a, d) 0.25mM, (b, e) 1.0 mM, (c, f) 1.5mM.

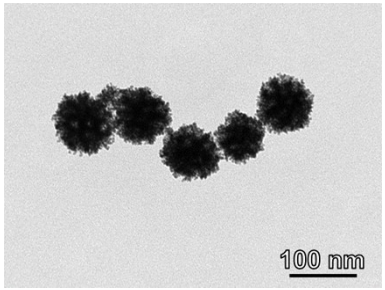

Fig. S3 TEM image of Pt nanoparticles used as control materials for evaluating the sonodynamic performance.

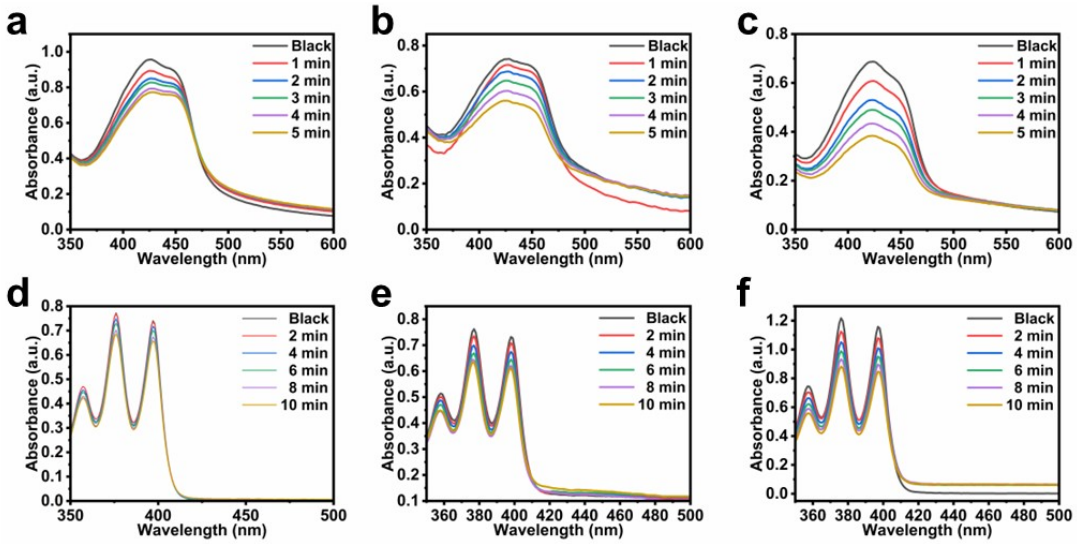

Fig. S4 UV-vis spectra of DPBF in the (a) US, (b) Pt+US, and (c) MOCs+US groups under a US irradiation (1 MHz, 1.0 W cm^{-2}). UV-vis spectra of ABDA in the (d) US, (e) Pt+US, and (f) MOCs+US groups under a US irradiation (1 MHz, 1.0 W cm^{-2}).

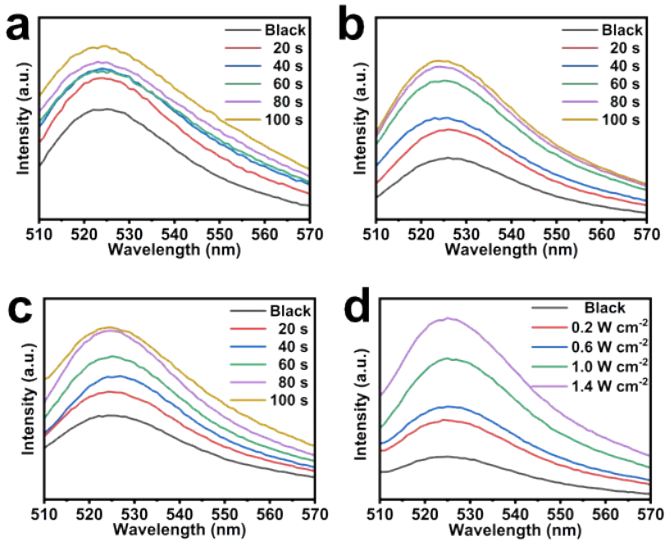

Fig. S5 The fluorescence spectra of SOSG in the (a) US, (b) Pt+US and (c) MOCs+US groups after exposing to an US irradiation (1 MHz, 1 W cm^{-2}) for different times. (d) The fluorescence intensity of SOSG in the presence of Pt-MOCs at the concentration of 75 μg mL^{-1} upon 1 min US irradiation at varied power densities.

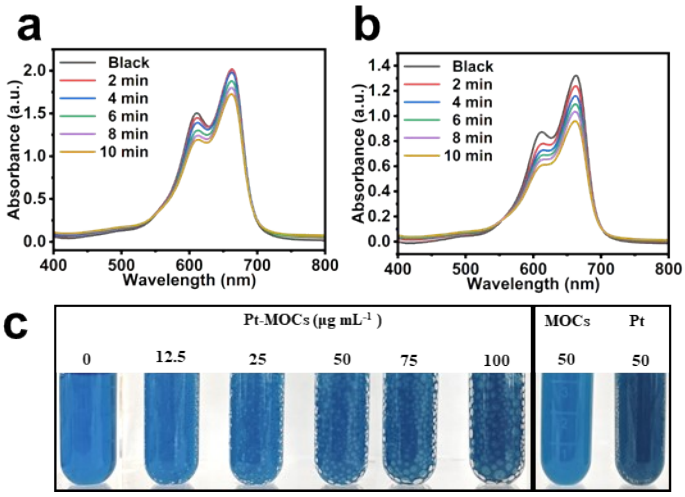

Fig. S6 UV-vis spectra of aqueous MB solution mixed with (a) PBS and (b) Pt-MOCs, and exposed to an US irradiation (1 MHz, 1.0 W cm^{-2}). (c) Photographs of H_2O_2 solutions in the presence of Pt-MOCs with different concentrations, MOCs at 50 μg mL^{-1}, and Pt nanoparticles at 50 μg mL^{-1}.

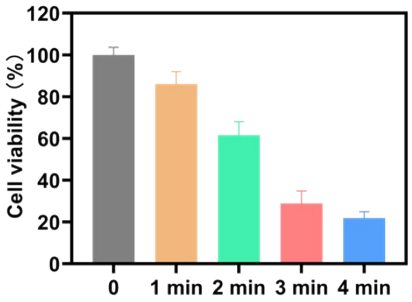

Fig. S7 Cell viability of 4T1 cells incubated with Pt-MOCs for different times.