

Enhanced Cancer Starvation Therapy Based on Glucose Oxidase/3-Methyladenine-Loaded Dendritic Mesoporous Organosilicon Nanoparticles

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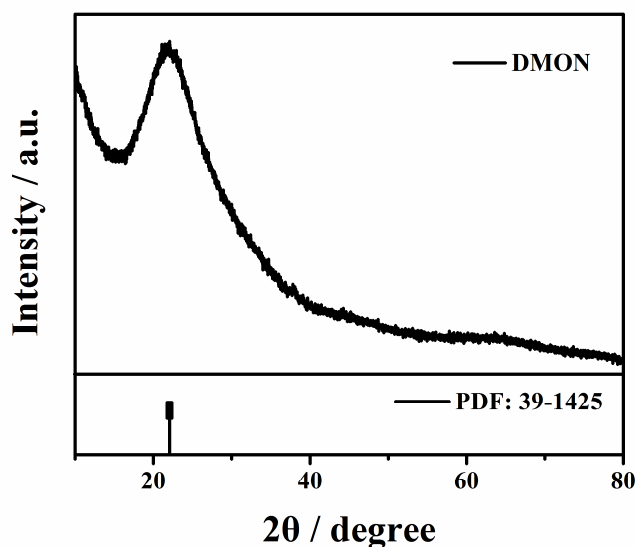


Figure S1. X-ray diffraction (XRD) pattern of DMON nanoparticles.

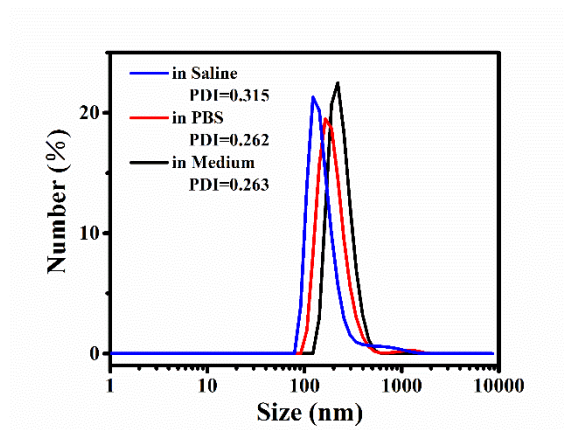


Figure S2. Dynamic light scattering (DLS) data of DMON@GOx/3-MA nanoparticles in different solutions.

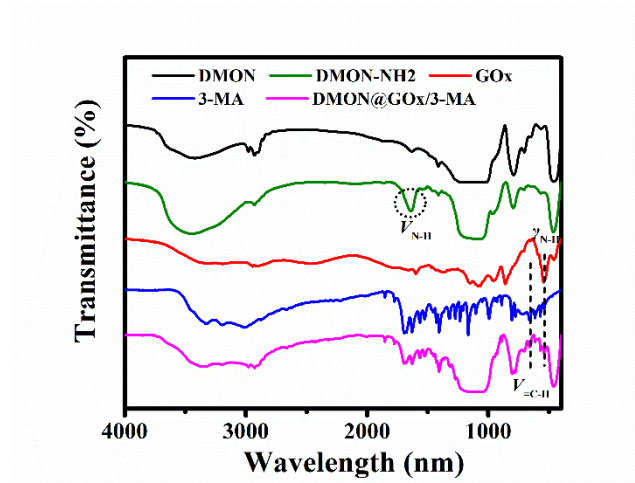


Figure S3. Fourier transform infrared (FTIR) spectra of GOx, 3-MA, DMON, DMON-NH₂ and DMON@GOx/3-MA.

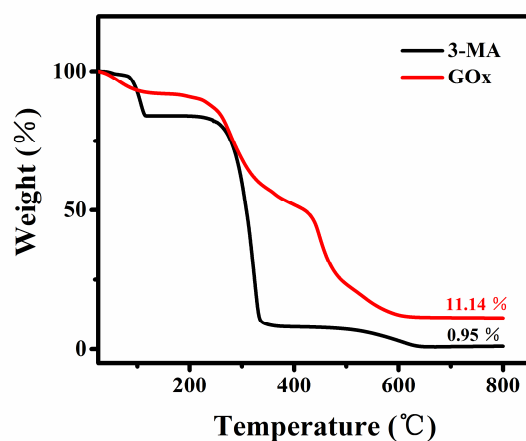


Figure S4. Thermogravimetric (TG) curves of GOx and 3-MA.

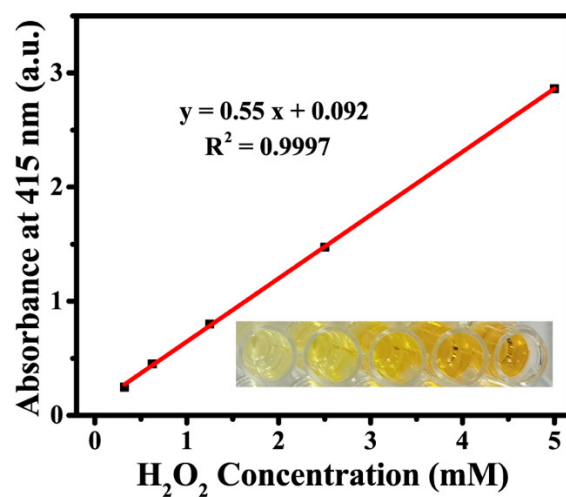


Figure S5. Standard curve of H₂O₂ detected by titanous sulfate reagent.

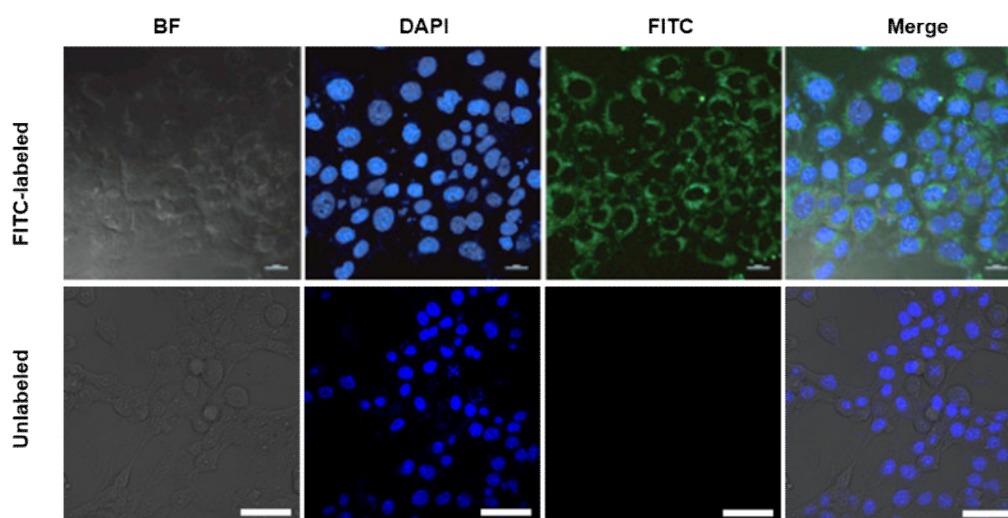


Figure S6. Confocal laser scanning microscopy (CLSM) images of FITC-labeled and unlabeled DMON@GOx/3-MA in the 4T1 cells (scale bar = 50 μ m).

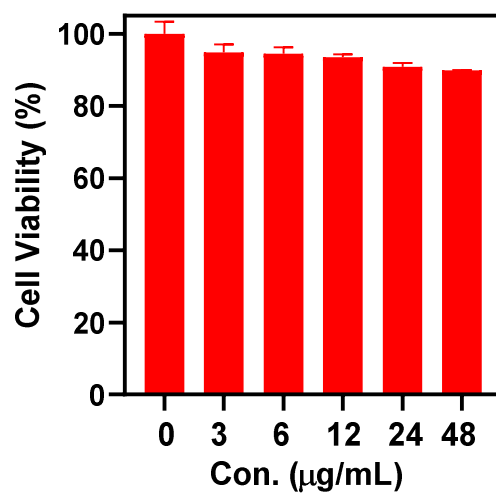


Figure S7. Cell viability of 4T1 cells treated with different concentrations of 3-MA for 24 h

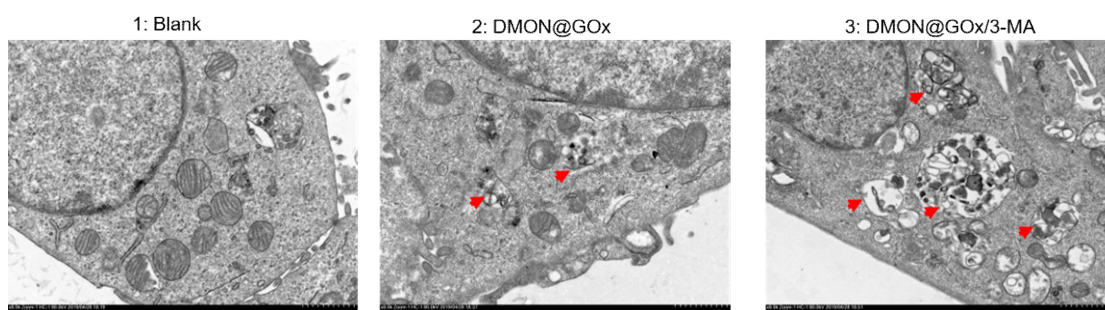


Figure S8. Bio-TEM images of 4T1 cells treated with DMON@GOx and DMON@GOx/3-MA for 24 h.

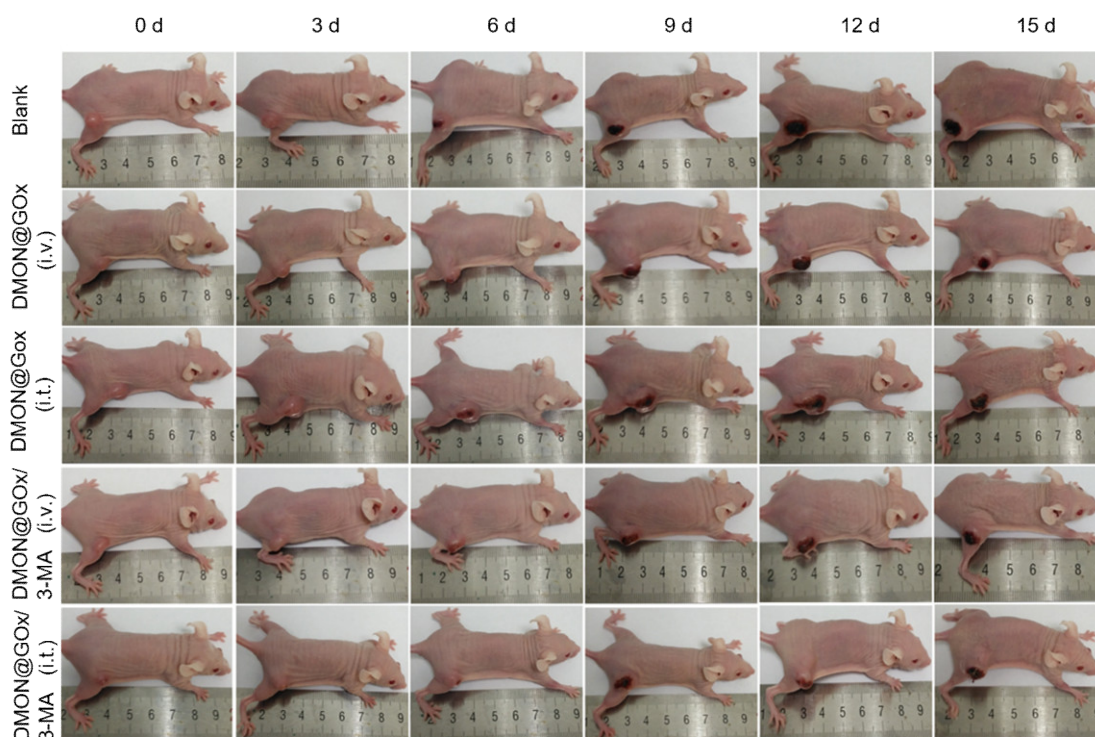


Figure S9. Digital photos of 4T1 tumor-bearing mice after different treatments.

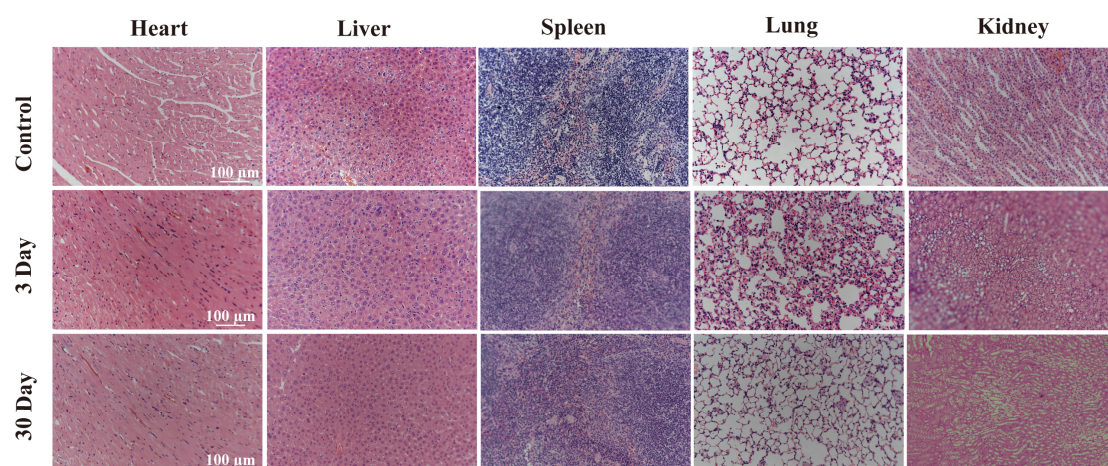


Figure S10. Pathological H&E-stained images of tissue sections from heart, liver, spleen, lung and kidney of the mice treated with DMON@GOx/3-MA. The tissue sections were harvested in 3 and 30 days after the intravenous injection of a 50 mg/kg dosage, showing no significant change of physiological and morphological abnormalities (Scale bars, 100 μ m).

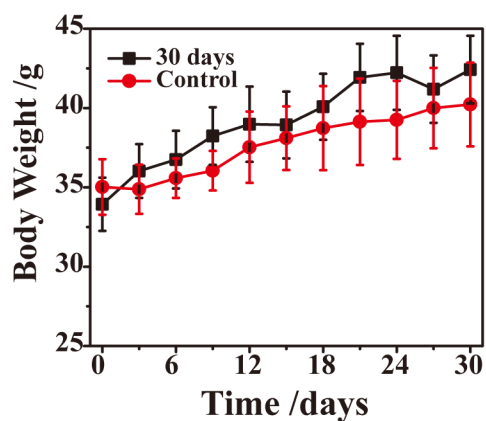


Figure S11. Time-dependent body weight record of Kunming mice after i.v. injection of DMON@GOx/3-MA with a calculated dose of 75 mg/kg (n = 6, mean \pm s.d.).