

# Cantharidin-Loaded Biomimetic MOF Nanoparticles Cascade to Enhance Fenton Reaction Based on Amplified Photothermal Therapy

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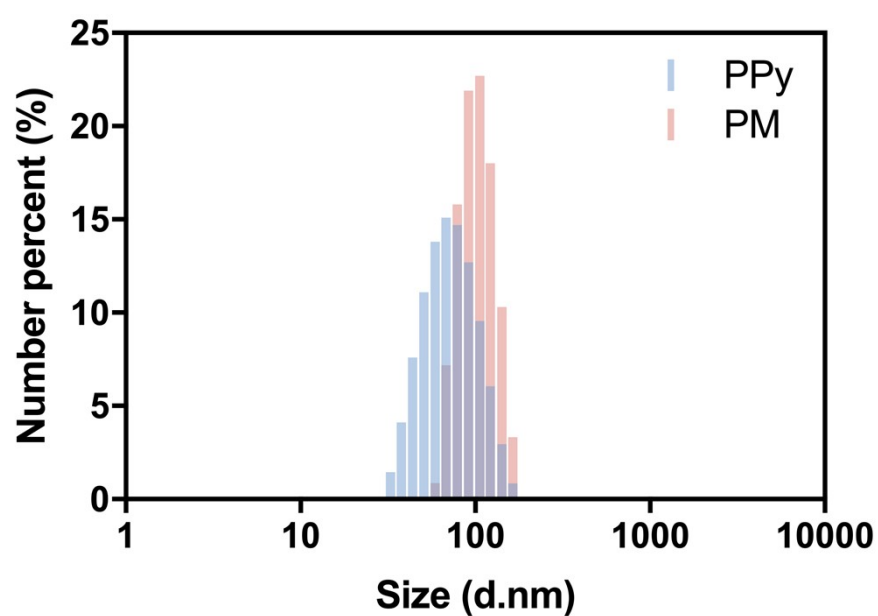
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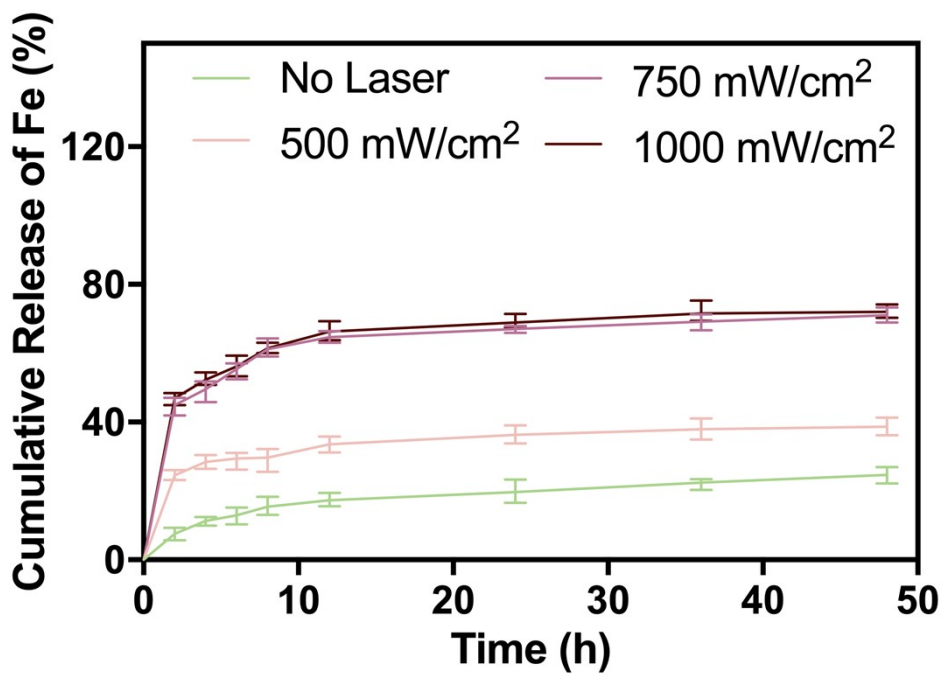
(Zhaoming Guo)

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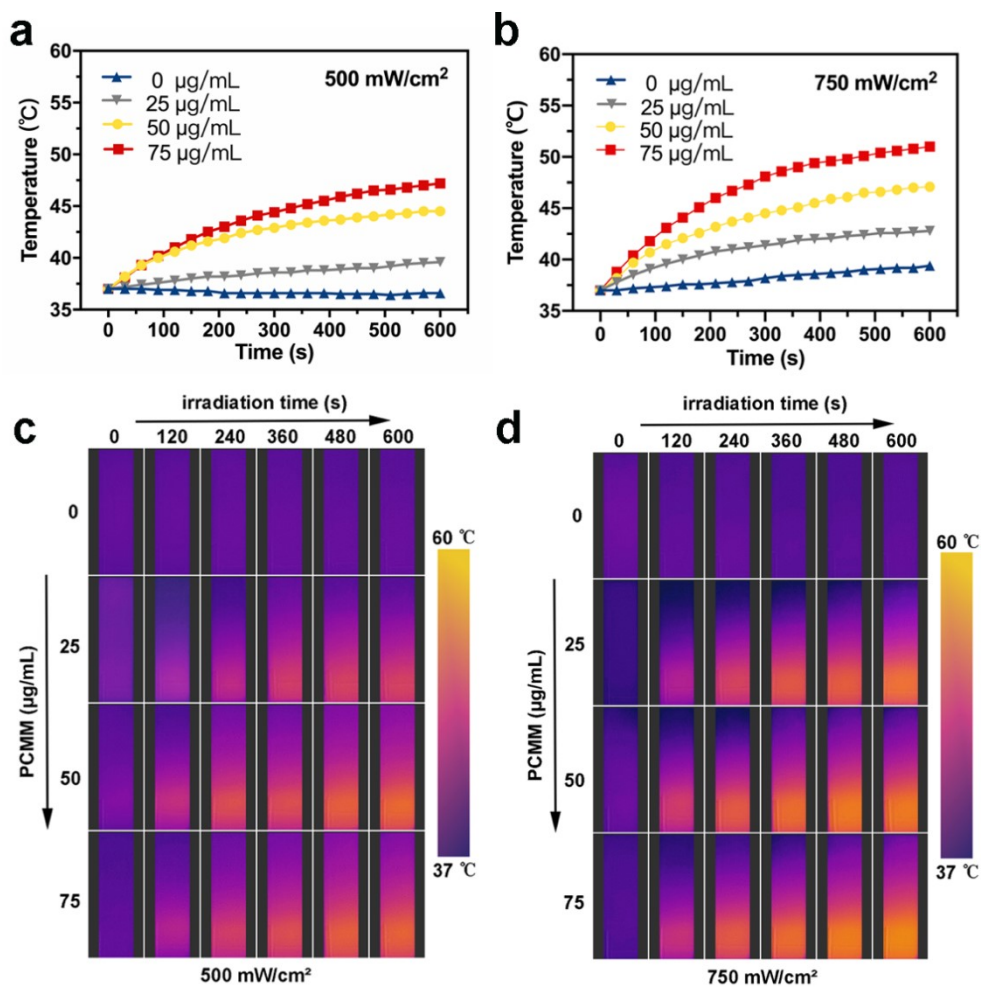
E-mail address: [fujj@gzhmu.edu.cn](mailto:fujj@gzhmu.edu.cn) (Jijun Fu)



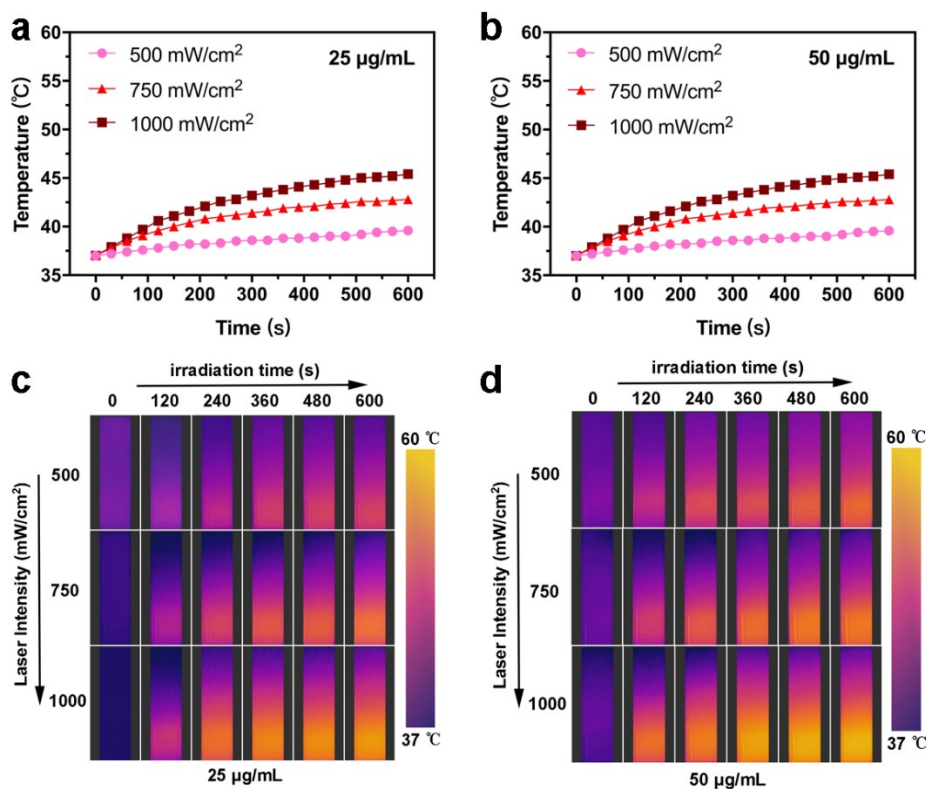
**Figure S1.** Average hydrodynamic size of PPy and PM.



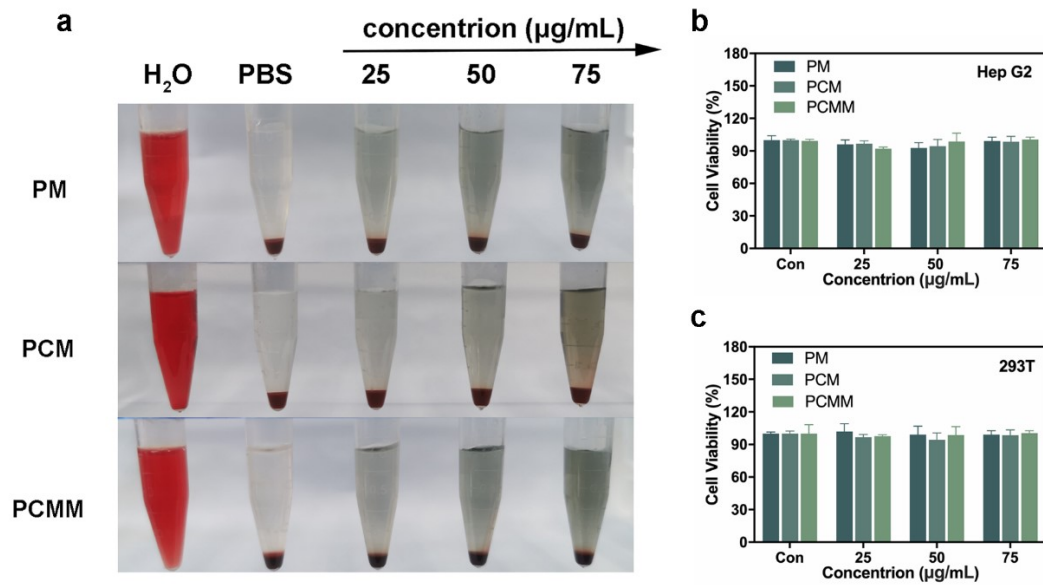
**Figure S2.** Fe release of PCMM with three light intensities of Near-infrared laser irradiation (808 nm) for 10 min.



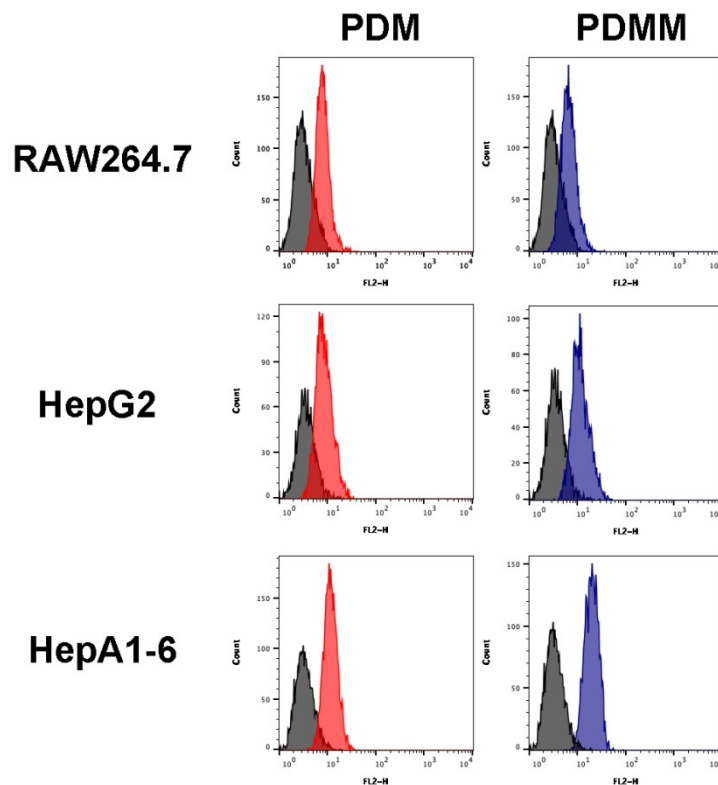
**Figure S3.** a) and b) are the temperature (°C) of PCMM at 500 and 750 mW/cm<sup>2</sup> near-infrared laser irradiation (808 nm) for 10 min, respectively. c) and d) are the near-infrared thermal images of three concentrations of PCMM suspension at 500 and 750 mW/cm<sup>2</sup> near-infrared laser irradiation (808 nm) for 10 minutes respectively.



**Figure S4.** a) and b) are the temperatures (°C) of PCMM (25 and 50 µg/mL) irradiated with near-infrared laser (808 nm) of three intensities for 10 min, respectively. c) and d) are near infrared thermal images of PCMM suspension (25 and 50 µg/mL) irradiated with near-infrared laser intensities (808 nm) of three light intensities for 10 min respectively.

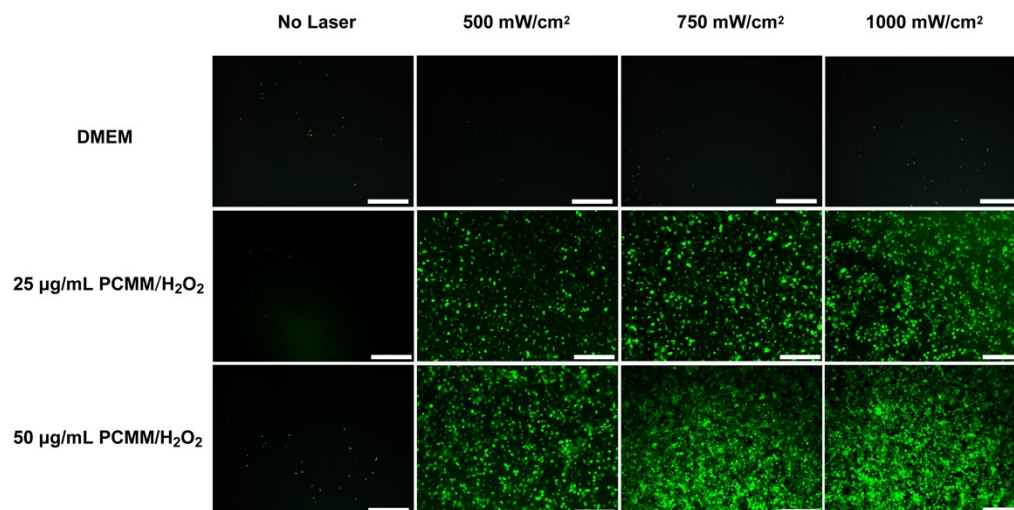


**Figure S5.** a) Haemolysis of cells in different concentrations of PM, PCM and PCMM suspensions. b) and c) The viability of HepG2 and 293T cells incubated with different concentrations of PM, PCM and PCMM suspensions for 48 h.

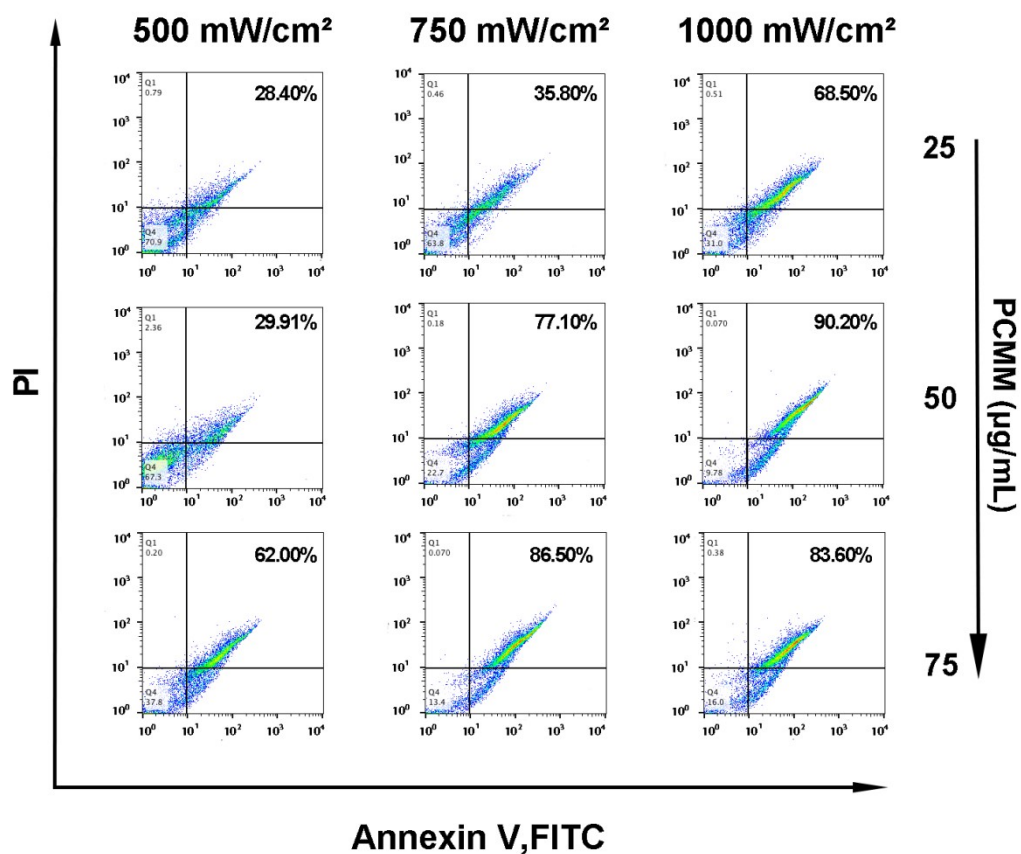


**Figure S6.** The cellular uptake of PDM and PDMM in four types of cells recorded by

flow cytometry.

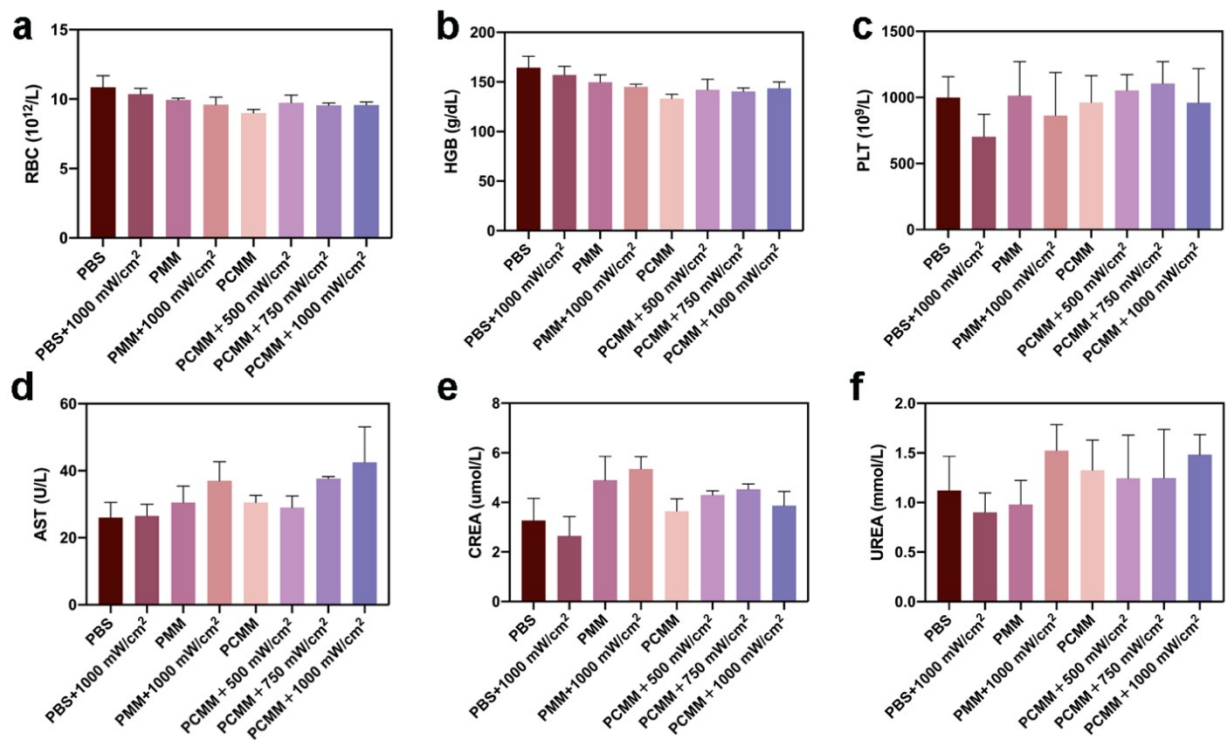


**Figure S7.** The ability to generate ROS in HepG2 cells recorded by CLSM. Scale bar: 200 µm.

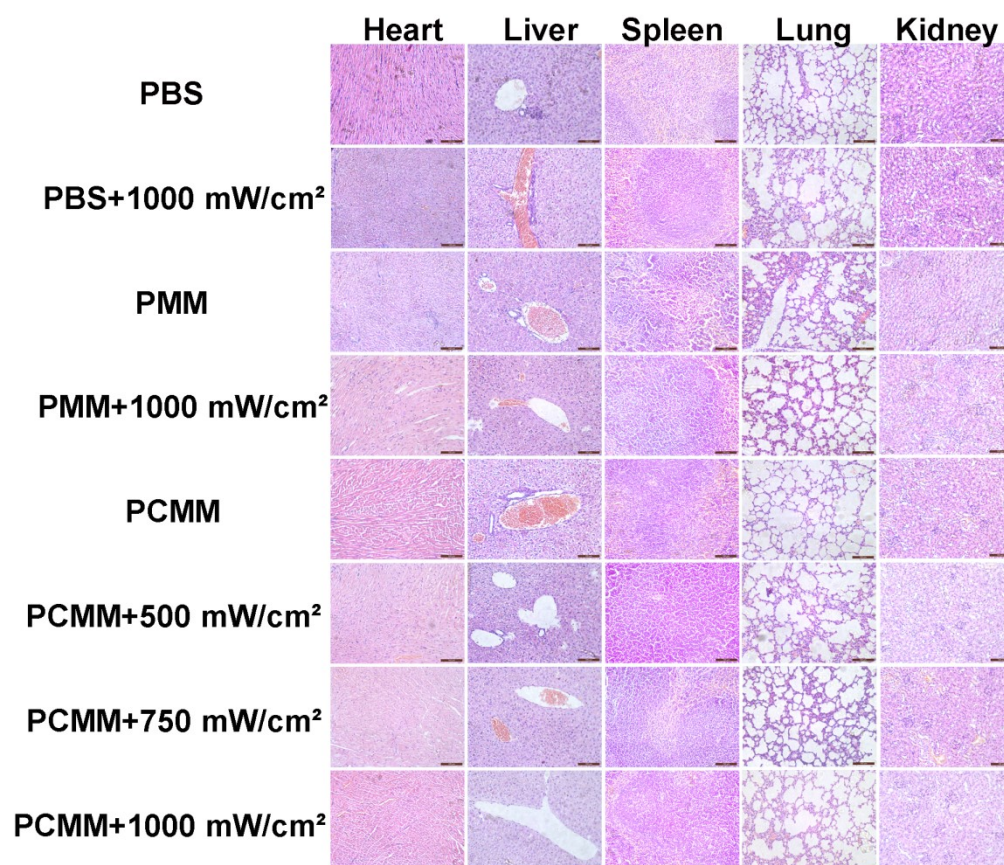


**Figure S8.** Flow cytometry analysis of HepG2 cells incubated with different concentrations of PCMM (25, 50 and 75 µg/mL) and irradiated with different intensities of laser for 10 min.





**Figure S9.** In vivo biosafety assessment of intravenous injection of PBS, PMM and PCMM. (a-c) Routine blood tests, including analysis of (a) red blood cells (RBCs), (b) haemoglobin (HGB) and (c) platelets (PLTs). (d-f) Blood biochemical tests, including analysis of (d) aspartate aminotransferase (AST), (e) creatinine (CREA) and (f) blood urea (UREA).



**Figure S10.** H&E staining images of the major organs after treatment. Scale bar: 200  $\mu\text{m}$ .