Electronic Supplementary Information

Layered MoS_2 nanoflowers for microwave thermal therapy

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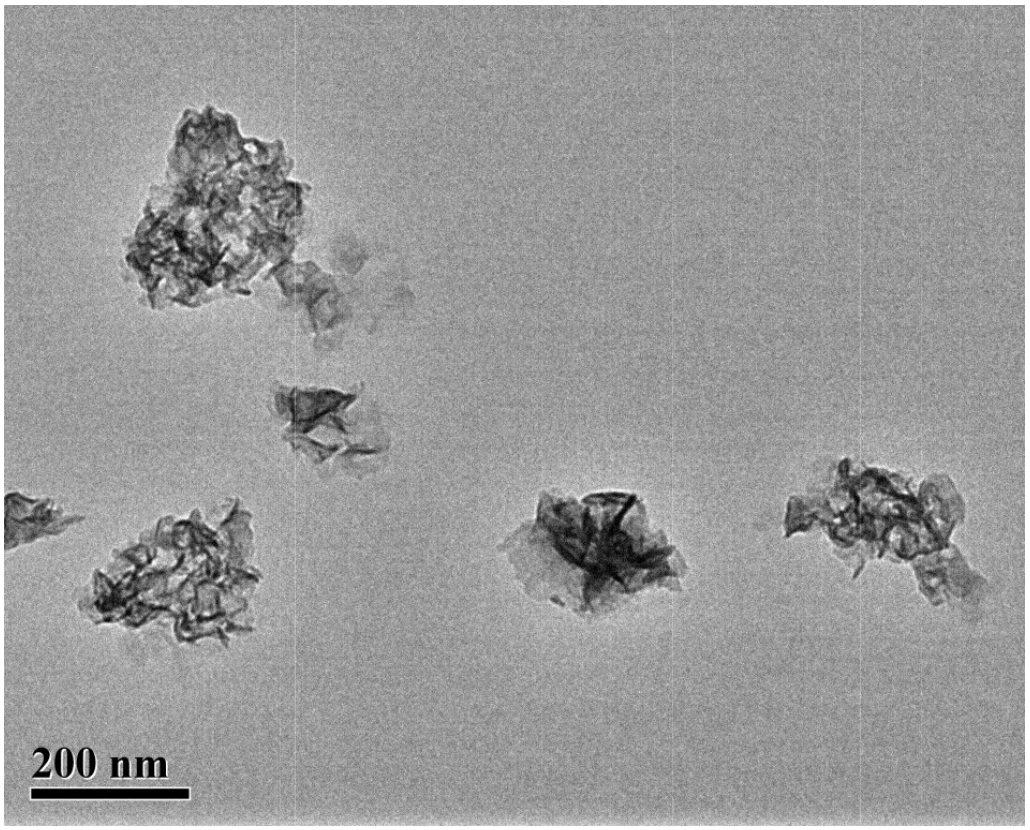

Fig. S1 TEM image of MoS_2.

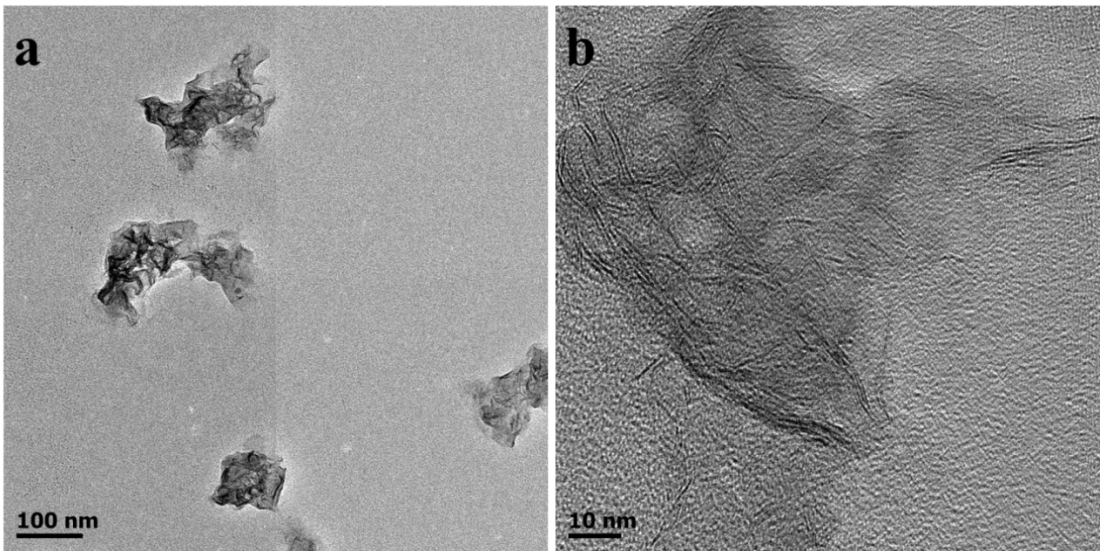

Fig.S2 (a) TEM image of BSA-MoS_2. (b) High-resolution TEM image of BSA-MoS_2.

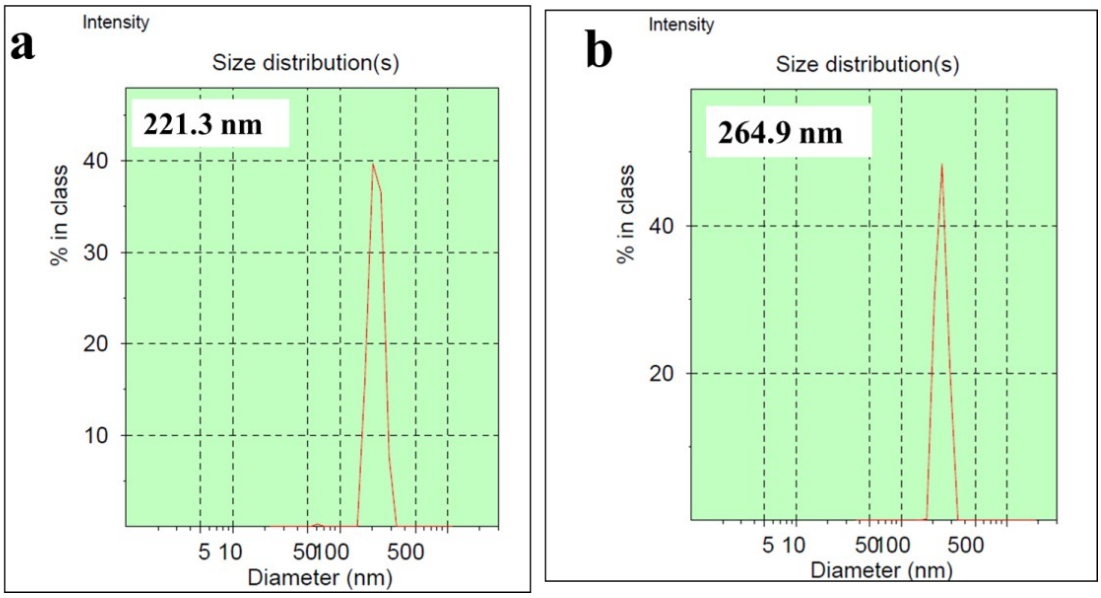

Fig. S3 The hydrodynamic size of MoS_2 (a) and BSA-MoS_2 (b).

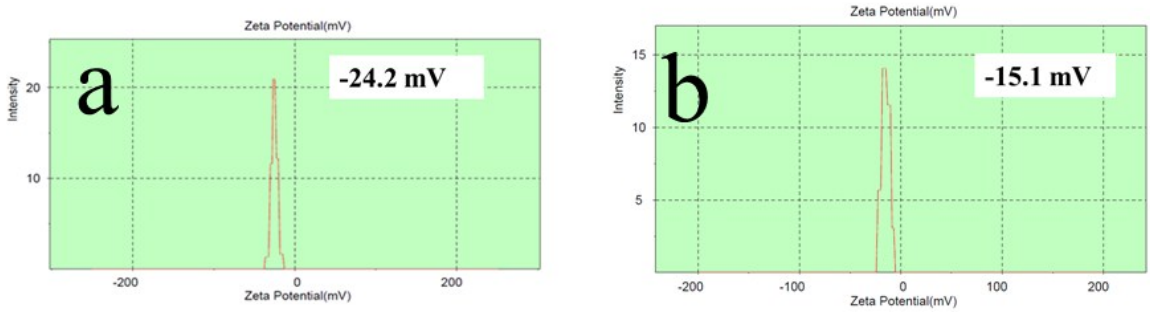

Fig. S4 Zeta potentials of the as-synthesized MoS_2 (a) and BSA-MoS_2 (b).

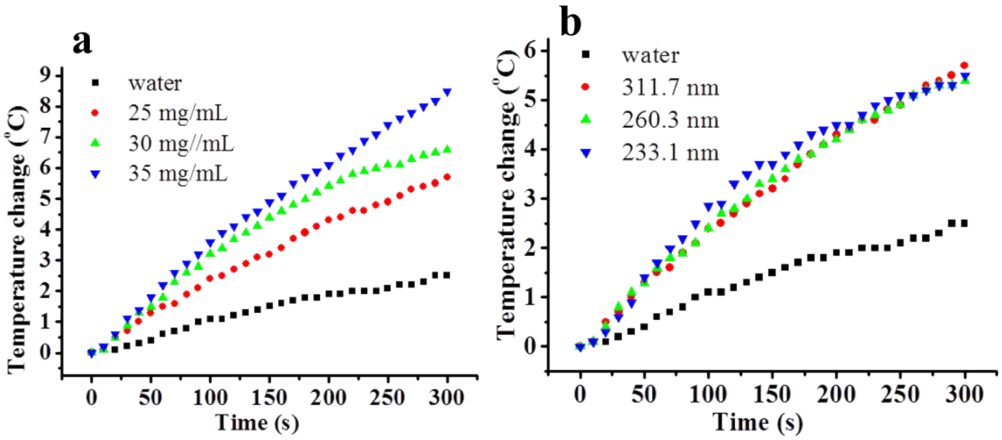

Fig. S5 MW heating of MoS_2 dispersed in deionized water. (a) MW heating effect influenced by different concentrations. (b) MW heating of MoS_2 with different sizes of MoS_2.

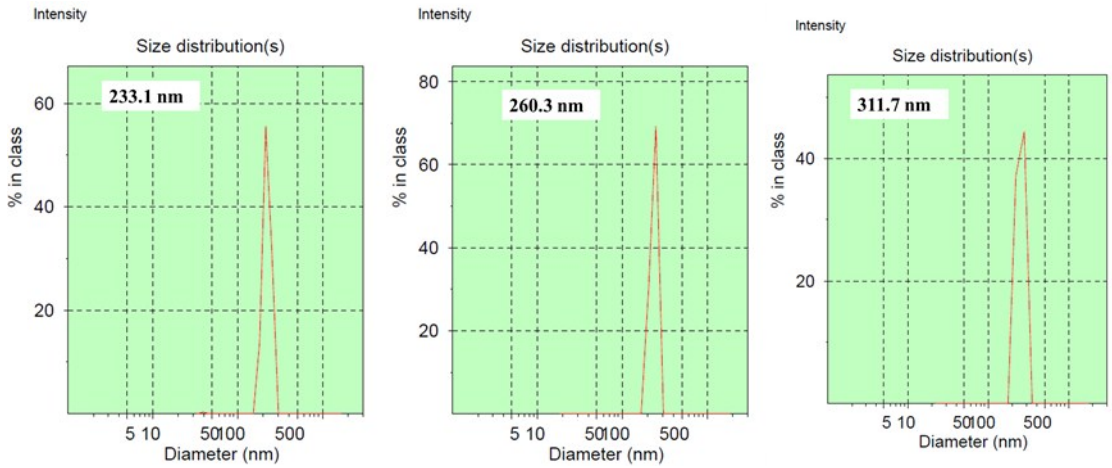

Fig. S6 The corresponding hydrodynamic sizes of MoS_2 in Fig. S5b.

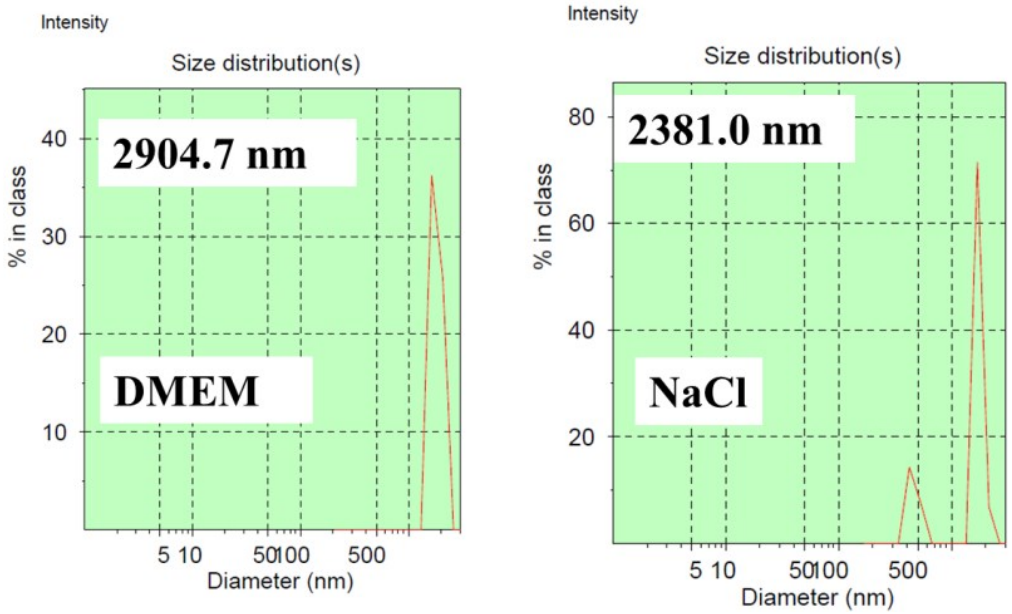

Fig. S7 The hydrodynamic sizes of MoS_2 dispersed in DMEM and NaCl solution for 3 h.

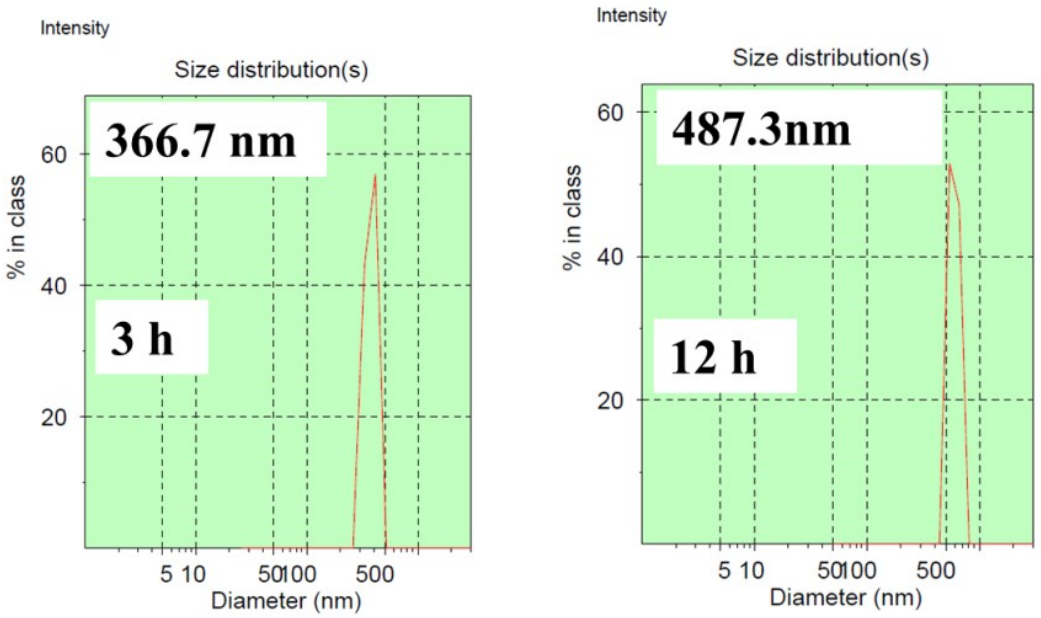

Fig. S8 The hydrodynamic sizes of BSA-MoS_2 dispersed in DMEM for 3 h and 12 h, respectively.

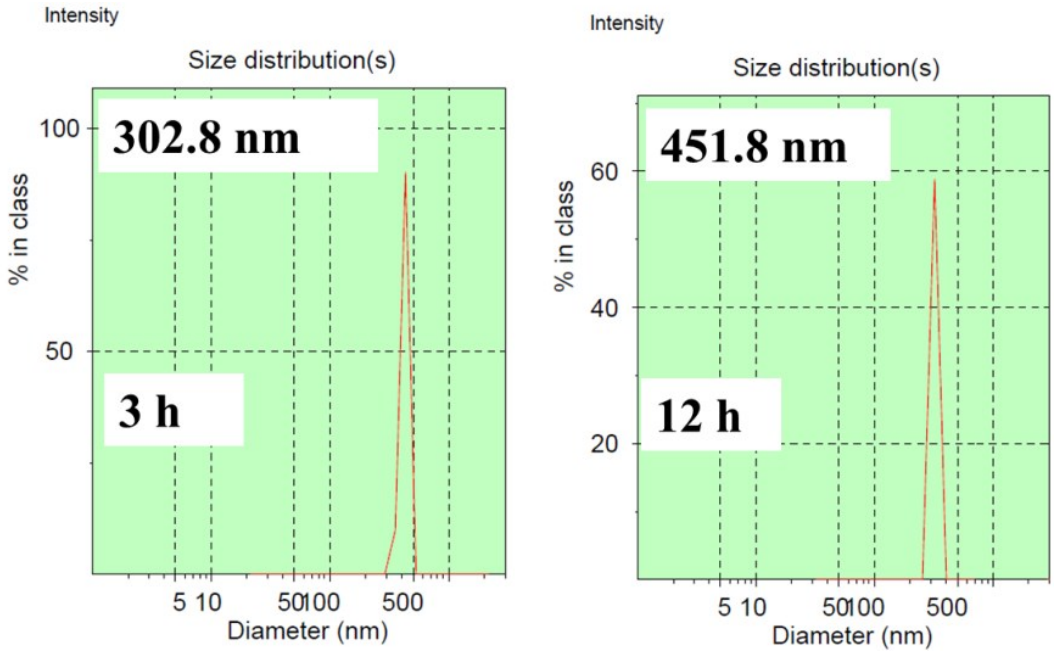

Fig. S9 The hydrodynamic sizes of BSA-MoS_2 dispersed in NaCl solution for 3 h and 12 h, respectively.

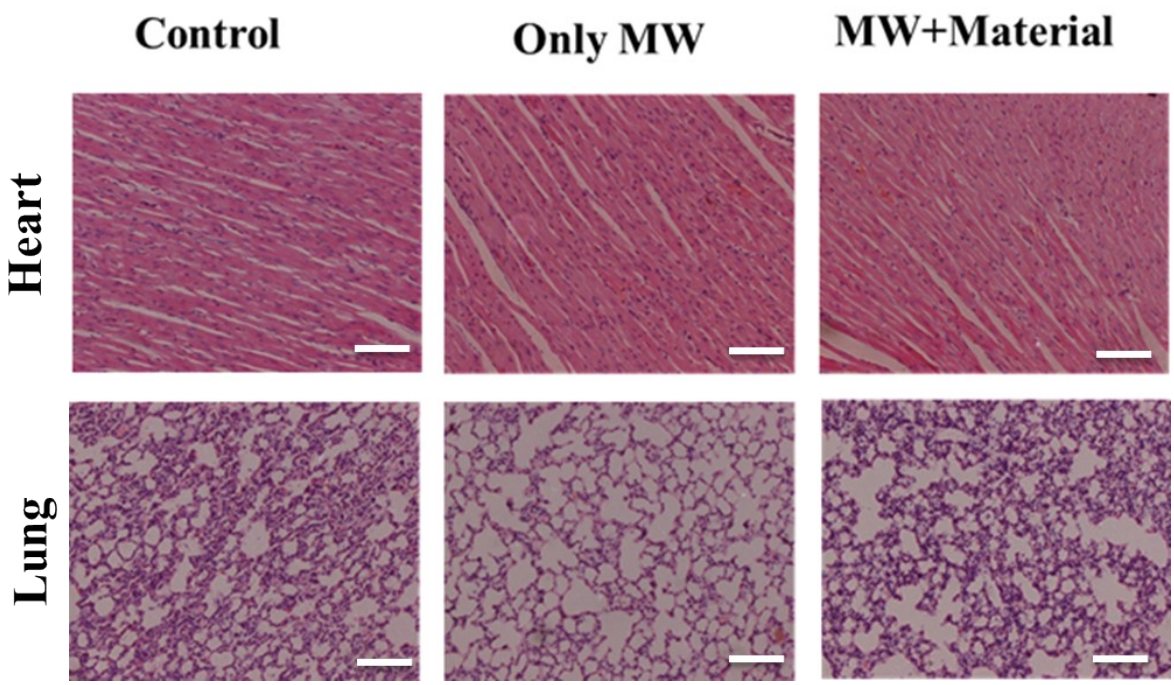

Fig. S10 Representative Hematoxylin and Eosin (H&E) stained histological images of tissues (all scale bar are 100 μm).

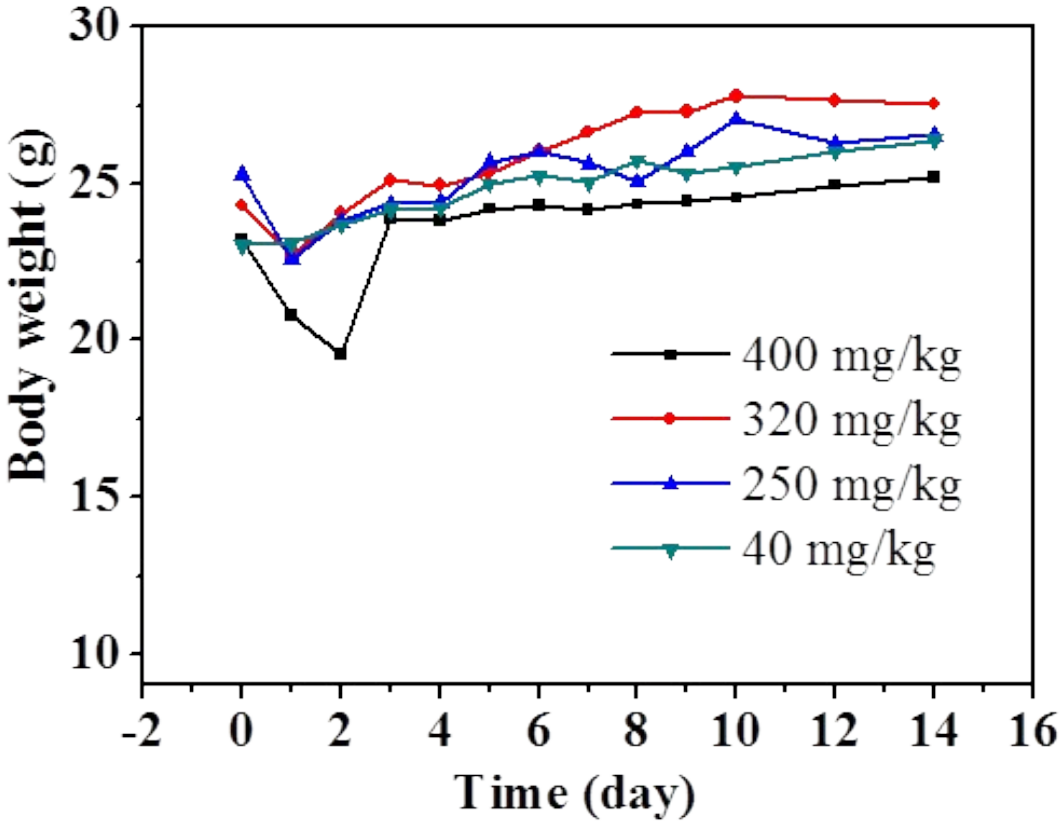

Fig. S11 The body weight of mice in toxicity pre-experiment.

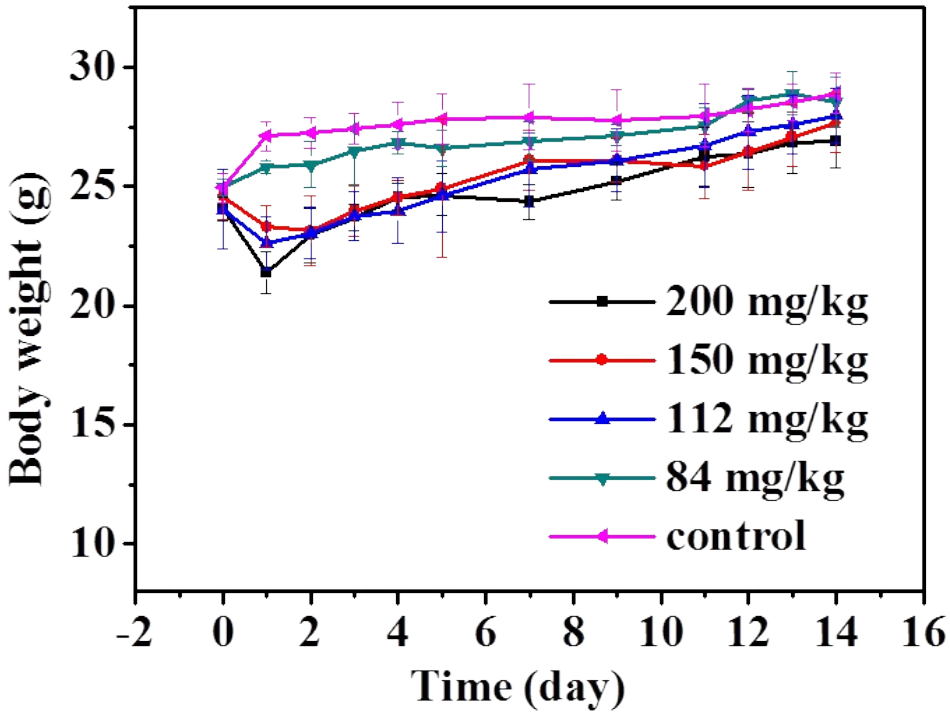

Fig. S12 The mean body weight of mice in toxicity experiment *in vivo* during treatment.

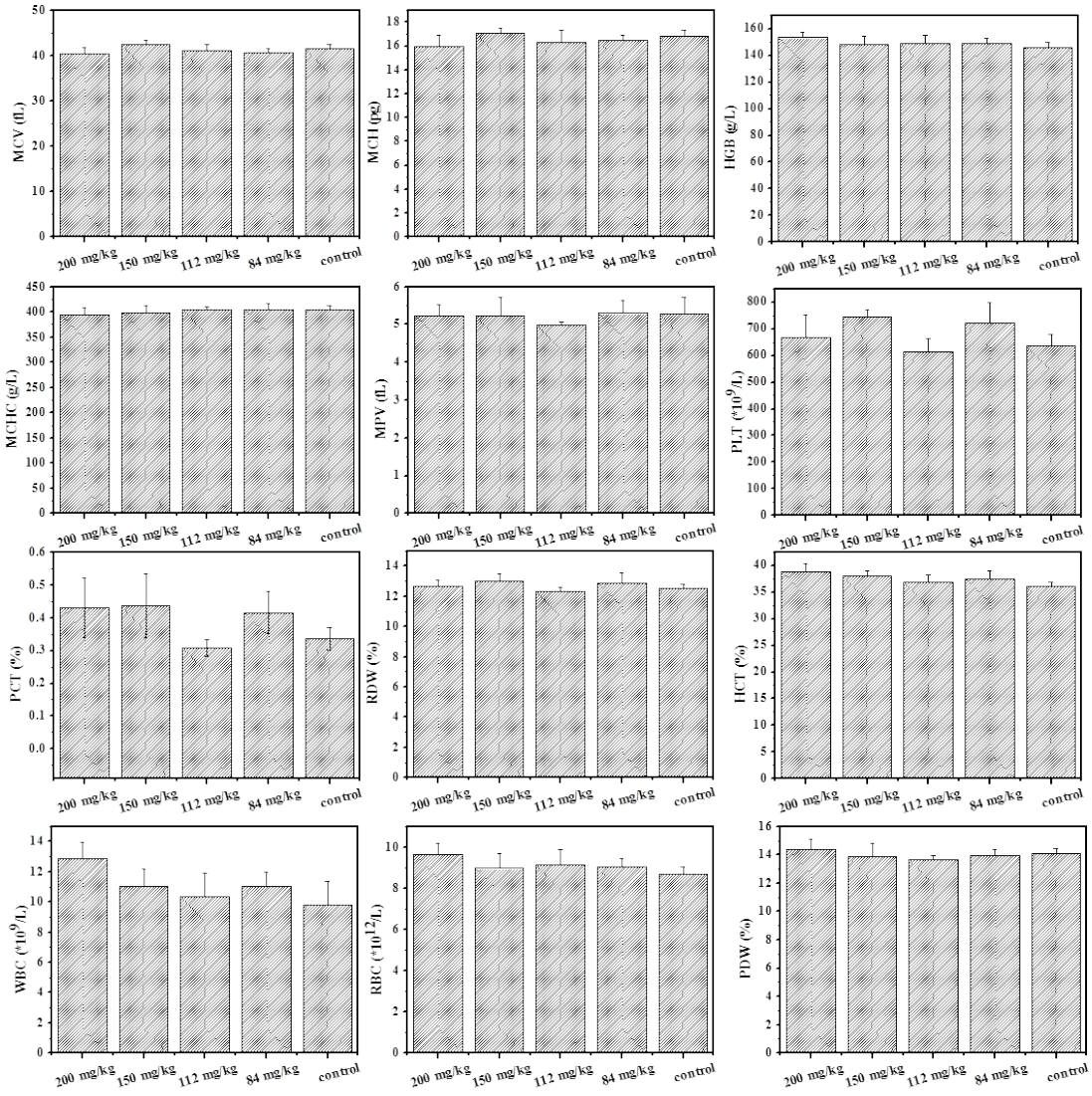

Fig. S13 Hematology routine index of mice in vivo toxicity experiment after 14 days.

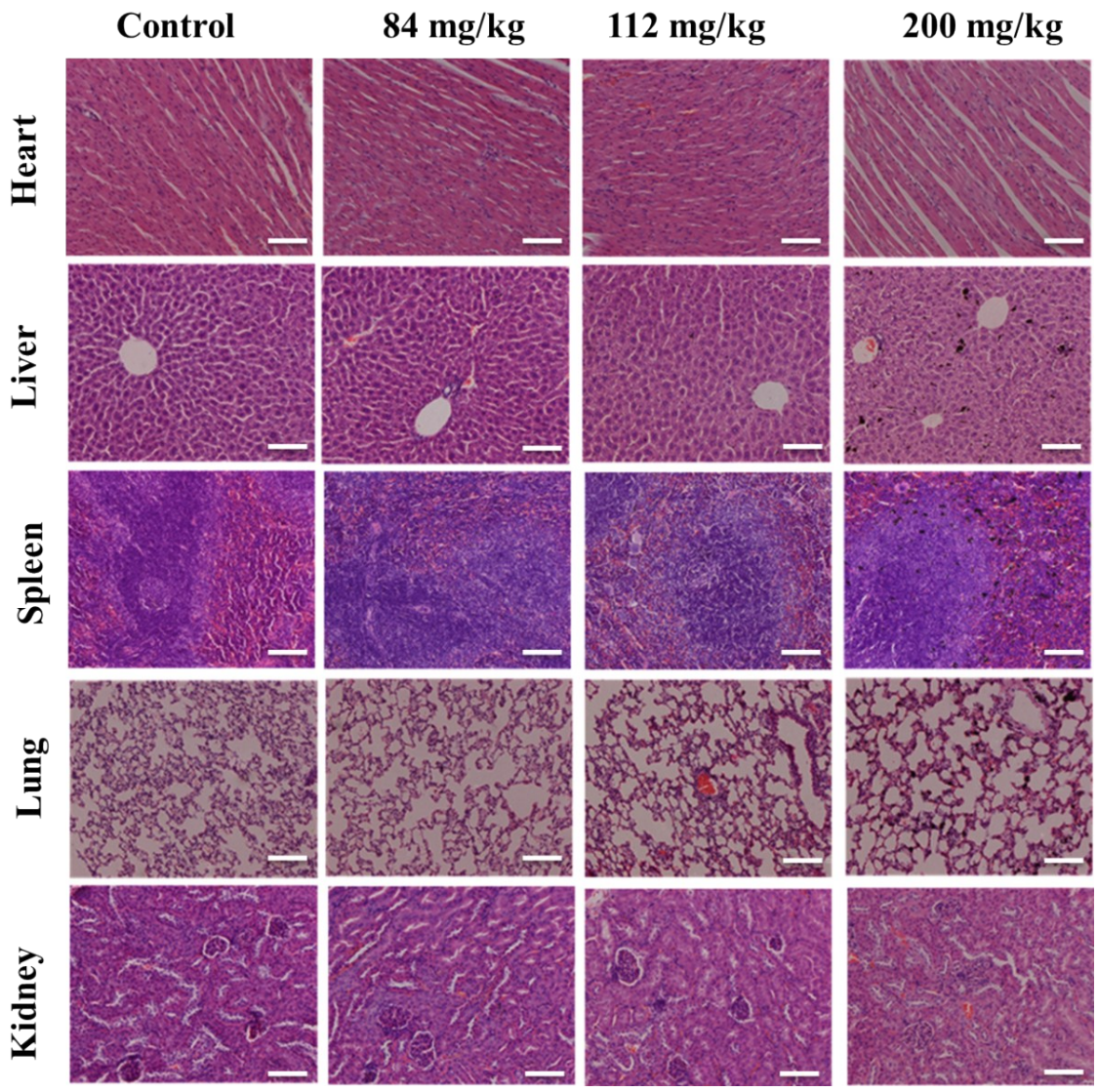

Fig. S14 Toxicity evaluation of BSA-MoS_2 via histological study. Histological section of heart, liver, spleen, lung and kidney obtained from healthy ICR mice in each group after excision in 14 days (all scale bars are 100 μm).