

Supporting information

Synthesis of Pt-MoS₂ with Enhanced Photothermal and Peroxidase-like Properties and Its Antibacterial Application

Liangyu Li^a, Yueqin Zhang^d, Yumeng Liu^d, Yaojuan Wu^a, Xiao Wang^d, Lidong Cao^{b,c},*

Xia Feng^{a,b}*

a Nursing Department, Zhejiang Provincial People's Hospital, Affiliated People's Hospital, Hangzhou Medical College

b Department of Hepatobiliary & Pancreatic Surgery and Minimally Invasive Surgery, Zhejiang Provincial People's Hospital, Affiliated People's Hospital, Hangzhou Medical College

c College of Mechanical Engineering, Zhejiang University, Hangzhou, China

d School of Public Health, Hangzhou Medical College, Hangzhou, China

* Correspondence: fx19961219@163.com (X.F.); ilkwenxu2019@sina.com (L.C.)

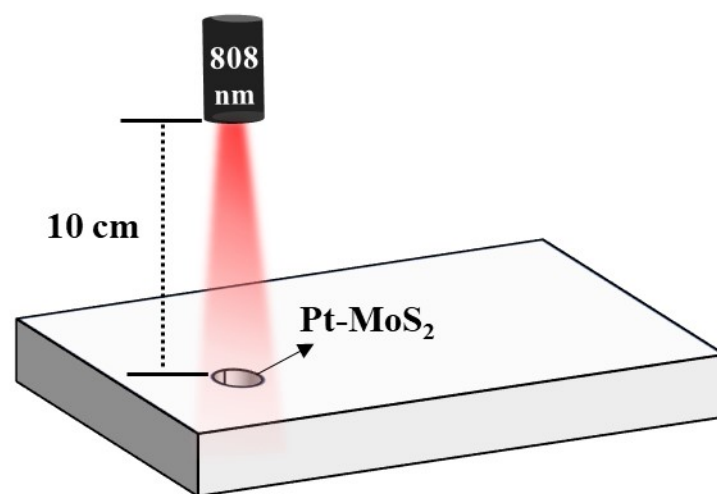


Fig. S1. Schematic illustration for the setup to test photothermal property.

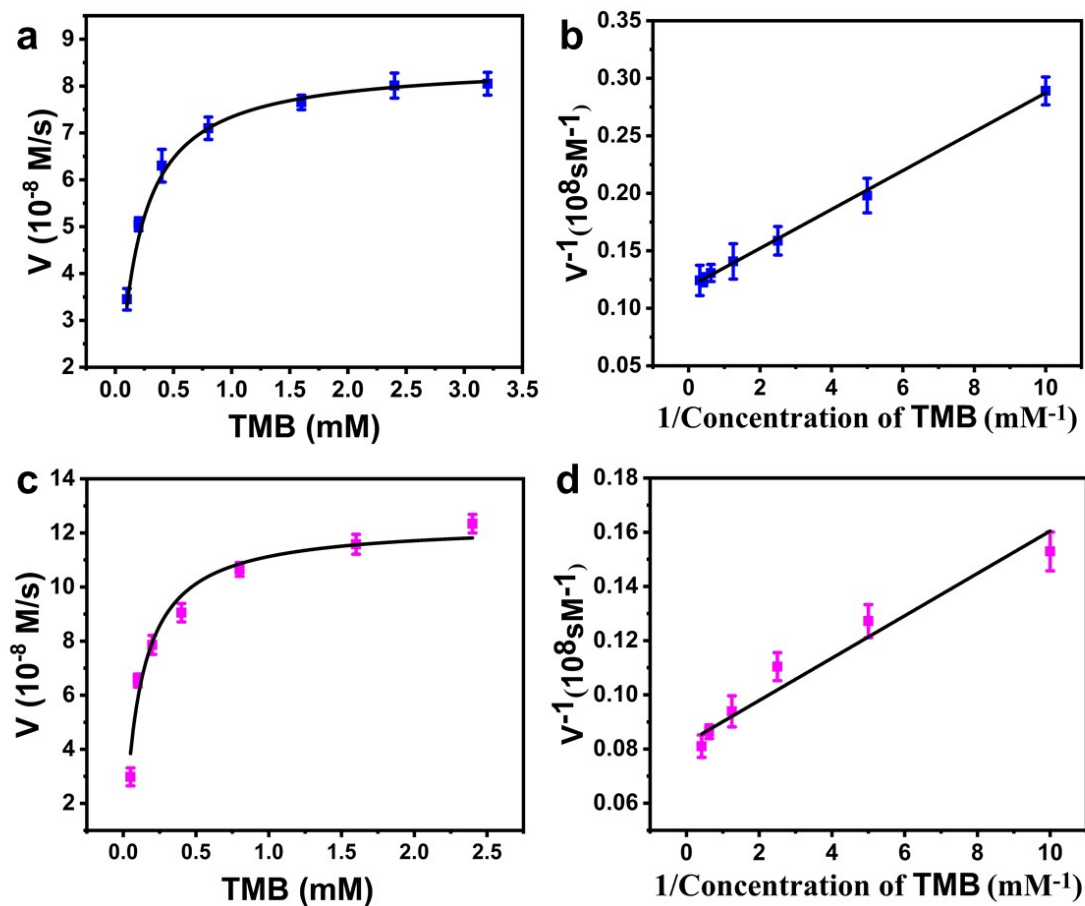


Fig. S2. Steady-state kinetic plots and Double-reciprocal plots of Pt-MoS₂ using TMB as substrate in the absence (a-b) and presence (c-d) of 808 nm NIR light irradiation ($1\text{W}/\text{cm}^2$, 5 min).

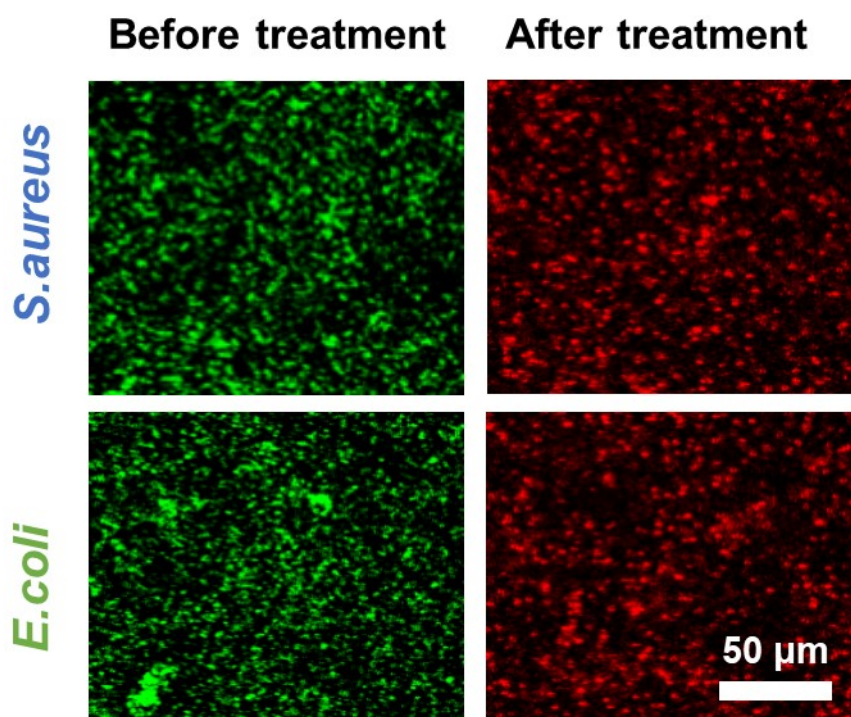


Fig. S3. The representative SYTO/PI live-dead staining fluorescent images of *S.aureus* and *E.coli* before and after treatment with H_2O_2 + Pt-MoS₂ + NIR.