

## Supporting Information

### **2-Dicyanomethylenethiazole Based NIR Absorption Organic Nanoparticles for Photothermal Therapy and Photoacoustic Imaging**

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## Contents

Scheme S1 Synthetic routine of TPTHM

Figure S1  $^1\text{H}$  NMR spectra of TPTHM in MeOD.

Figure S2  $^{13}\text{C}$  NMR spectra of TPTHM in MeOD.

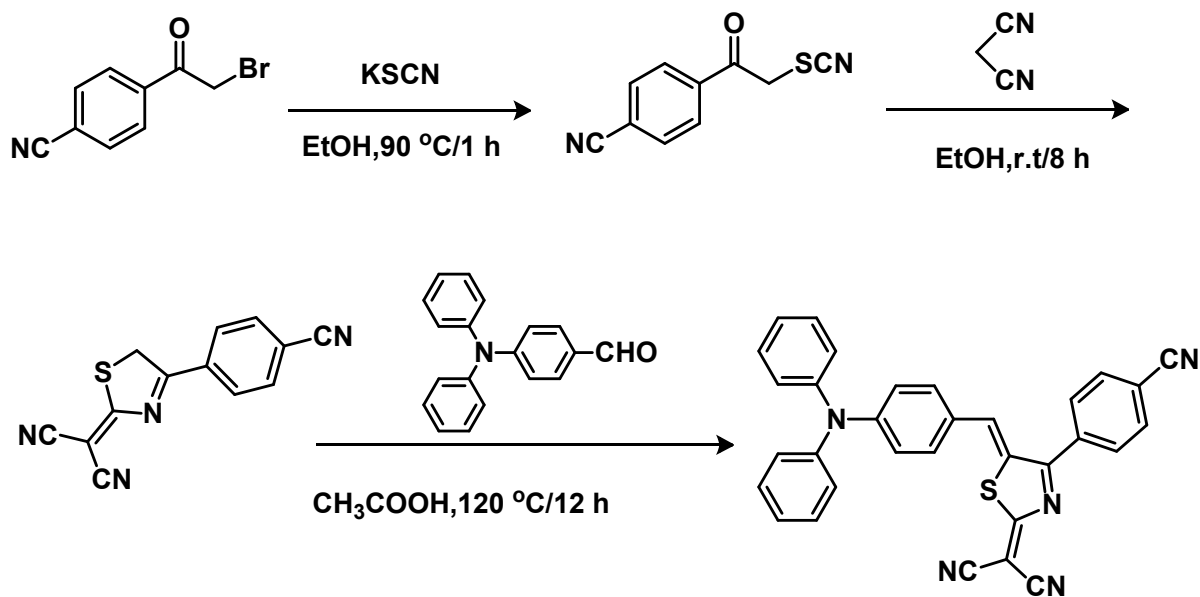
Figure S3 IR spectra of TPTHM.

Figure S4 Time constant for heat transfer of TPTHM NPs and DI water.

Figure S5 (A) UV-vis spectra of TPTHM NPs prepared (i) and after (ii) 808 nm NIR laser irradiation ( $4\text{ W/cm}^2$ , 10 min). (B) DLS data of TPTHM NPs after 808 nm NIR laser irradiation ( $4\text{ W/cm}^2$ , 10 min). (C) HOMO and LUMO molecular orbitals of TPTHM. (D) Optimized conformation of TPTHM.

Figure S6 (A) UV-vis spectra of TPTHM NPs prepared (i) and after (ii) storage at room temperature for 45 days. (B) DLS data of TPTHM NPs after storage at room temperature for 45 days.

Figure S7 Images of H&E-stained sections of heart, liver, spleen, lung and kidney harvested from the tumor-bearing mice with various treatments.



Scheme S1 Synthetic routine of TPTHM

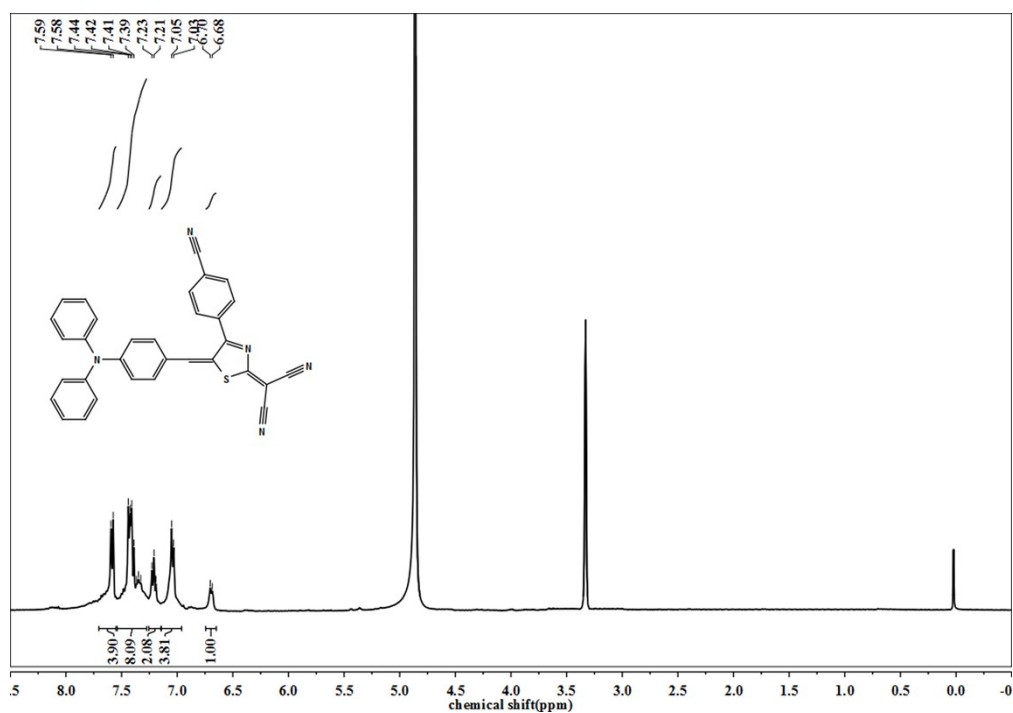


Figure S1  $^1\text{H}$  NMR(400 MHz, MeOD) of TPTHM

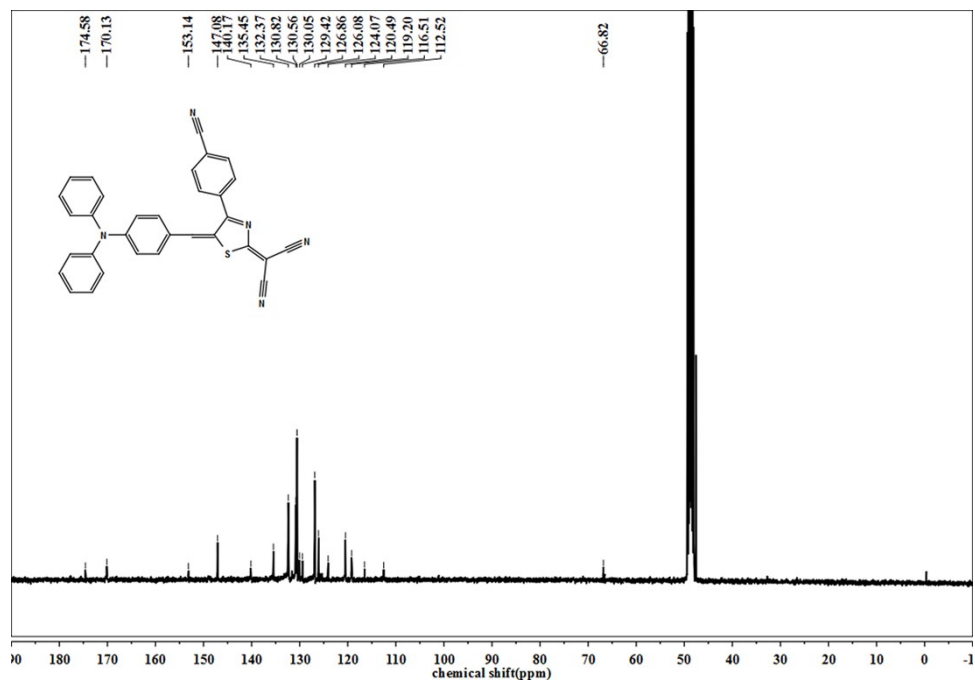


Figure S2  $^{13}\text{C}$ NMR (100 MHz, MeOD) of TPTHM

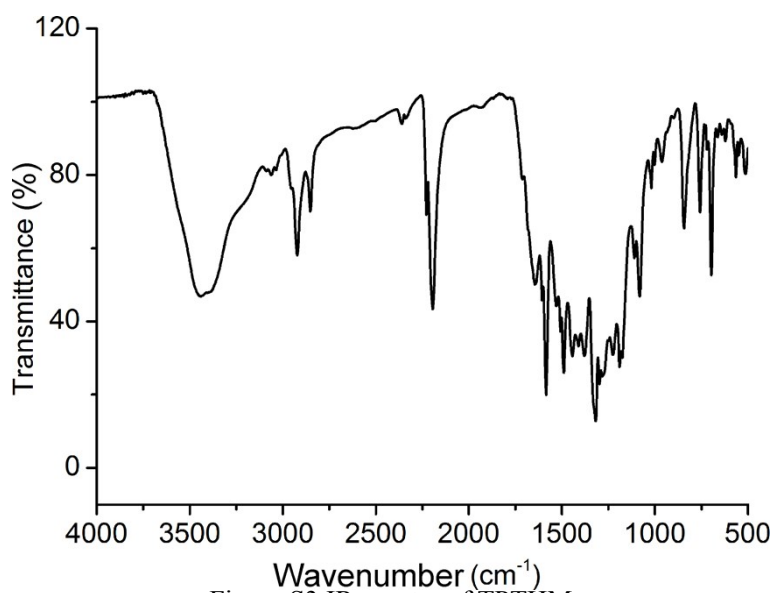


Figure S3 IR spectra of TPTHM

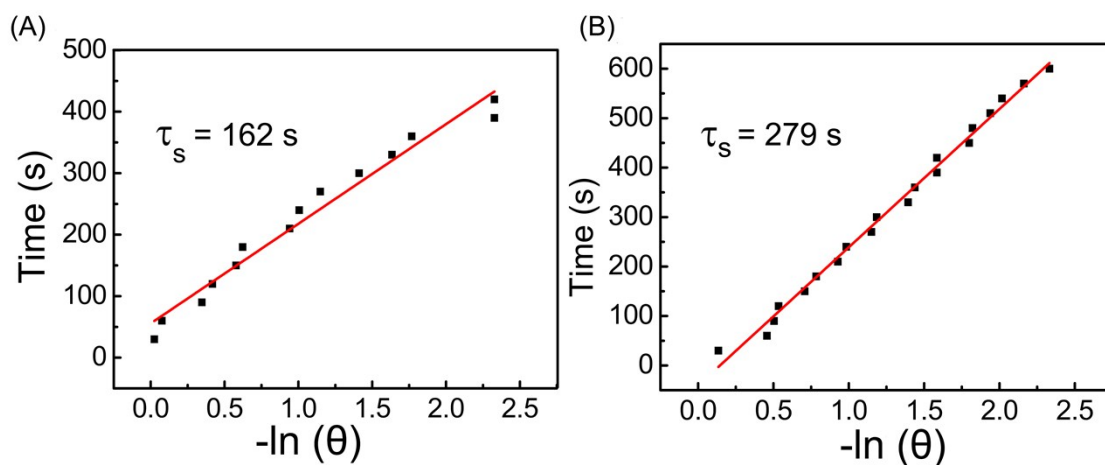


Figure S4 (A) Time constant for heat transfer of water. (B) Time constant for heat transfer of TPTHM NPs.

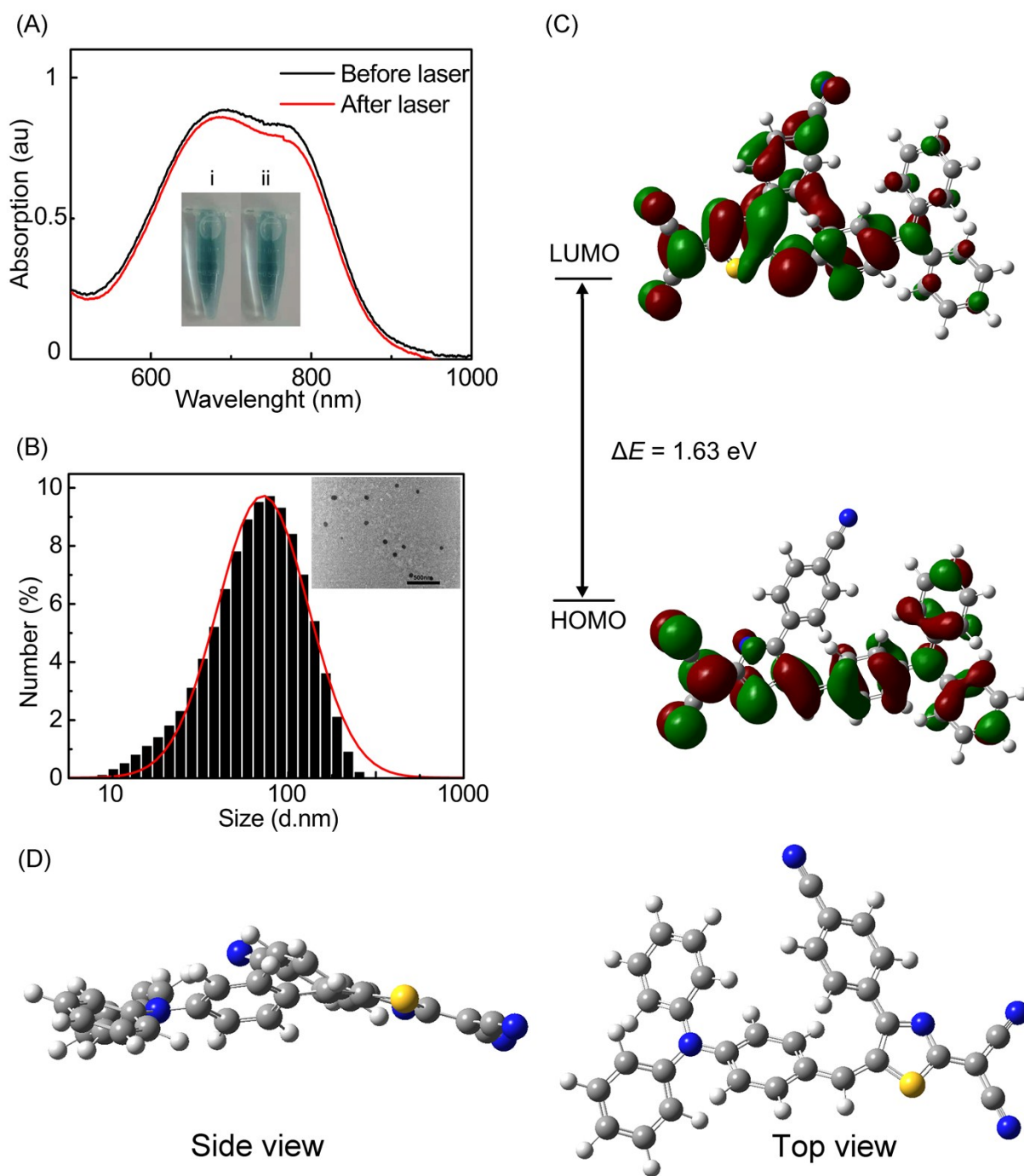


Figure S5 (A) UV-vis spectra of TPTHM NPs prepared (i) and after (ii) 808 nm NIR laser irradiation (4 W/cm<sup>2</sup>, 10 min). (B) DLS data of TPTHM NPs after 808 nm NIR laser irradiation (4 W/cm<sup>2</sup>, 10 min). (C) HOMO and LUMO molecular orbitals of TPTHM. (D) Optimized conformation of TPTHM.

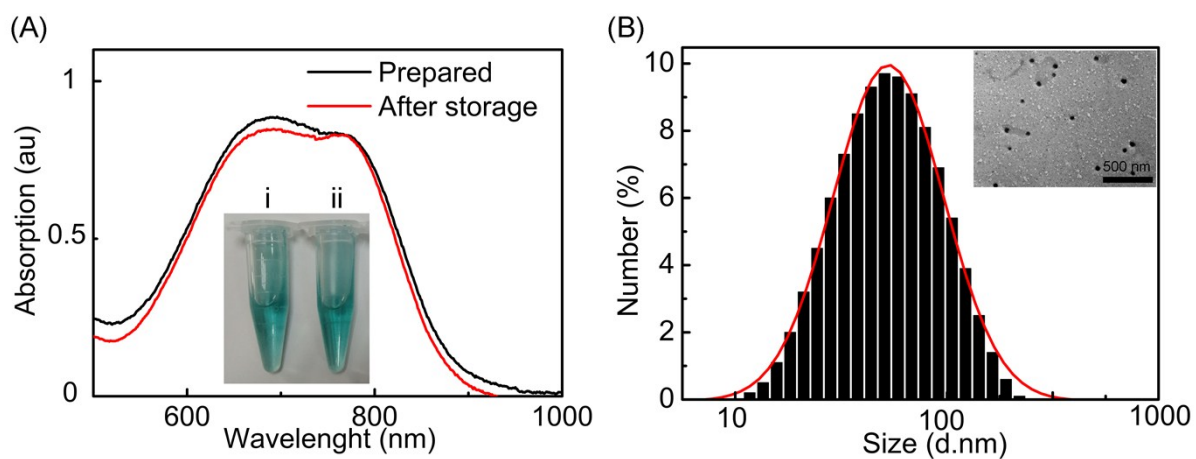


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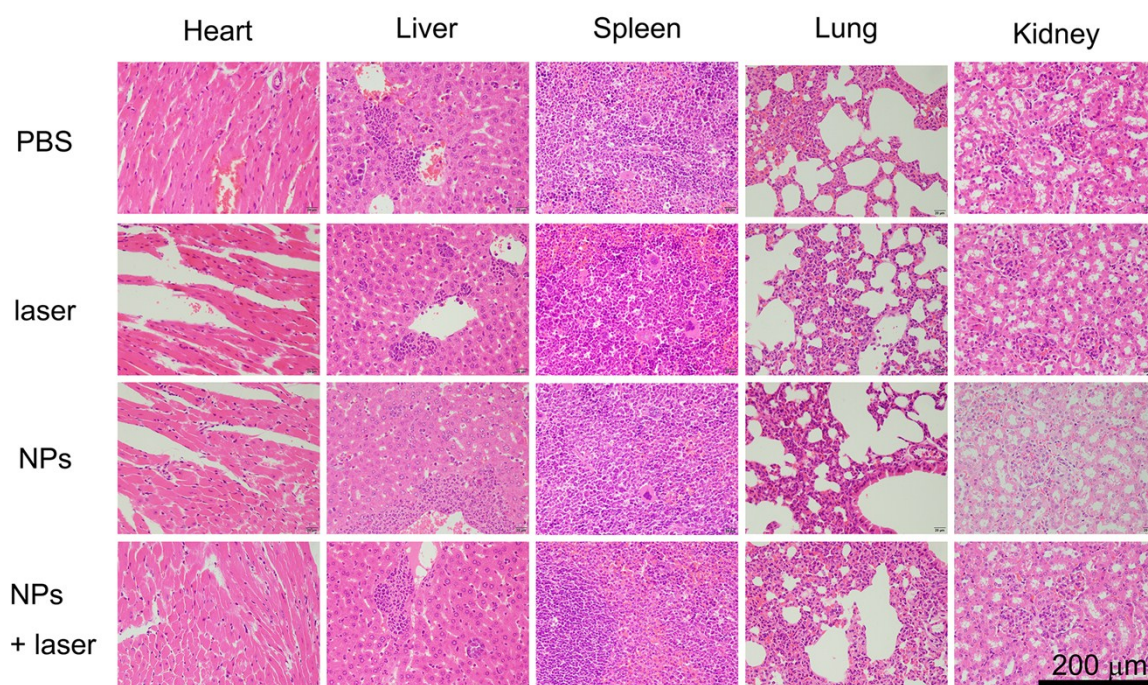


Figure S7 Images of H&E-stained sections of heart, liver, spleen, lung and kidney harvested from the tumor-bearing mice with various treatments.