

Supporting Information

Aggregation-Induced Emission Dye-Powered Afterglow Luminogens for Tumor Imaging

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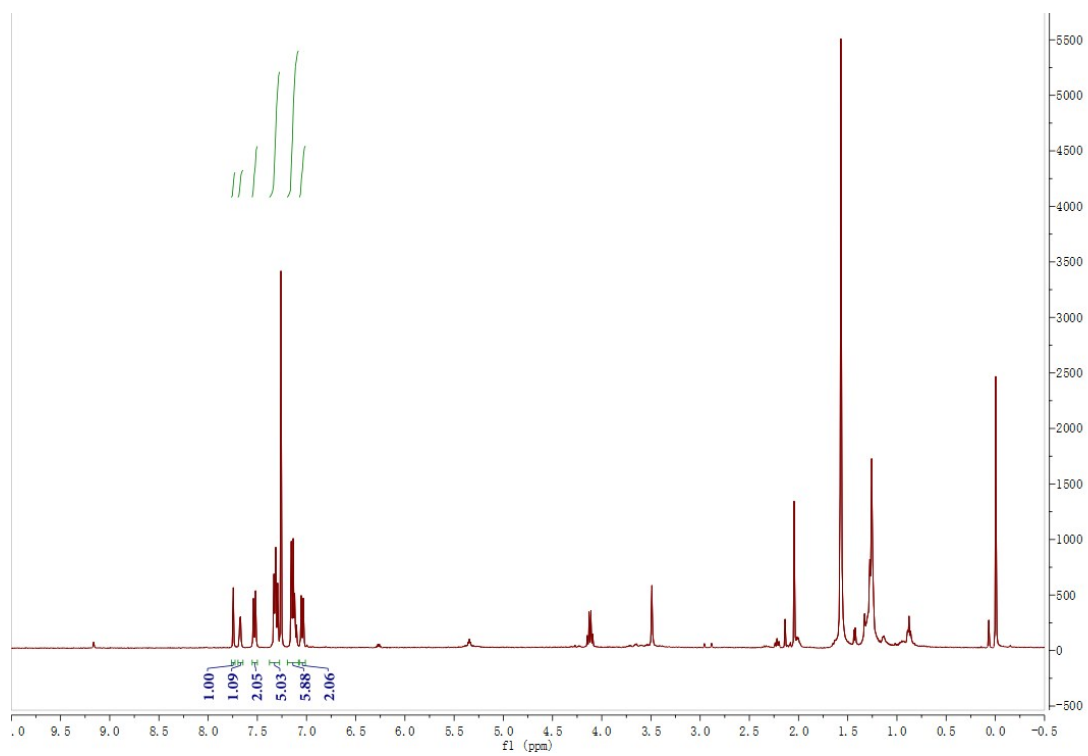


Figure S1. ^1H NMR of TTMN.

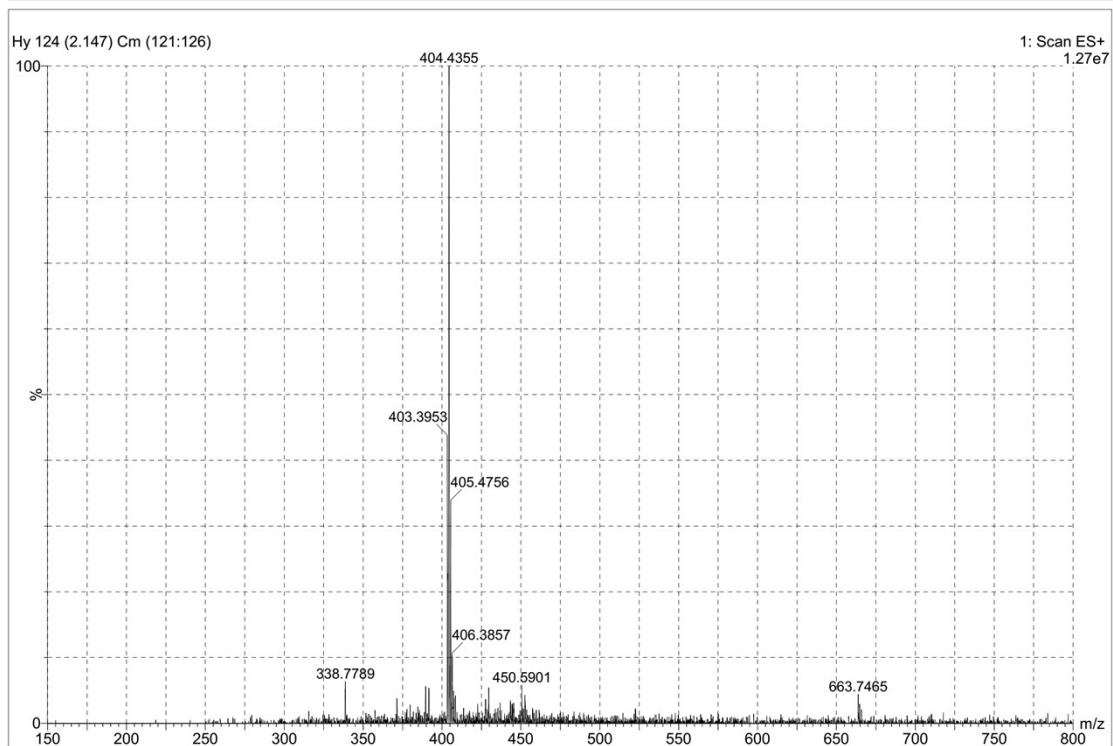
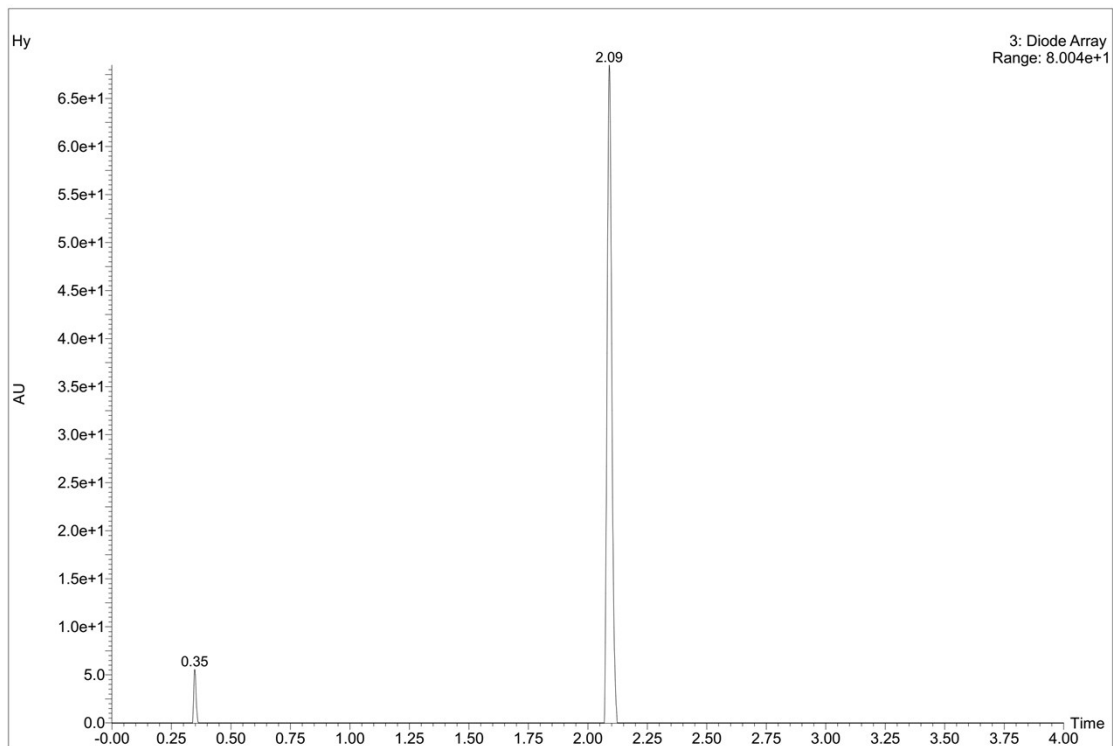


Figure S2. LC-MS of TTMN

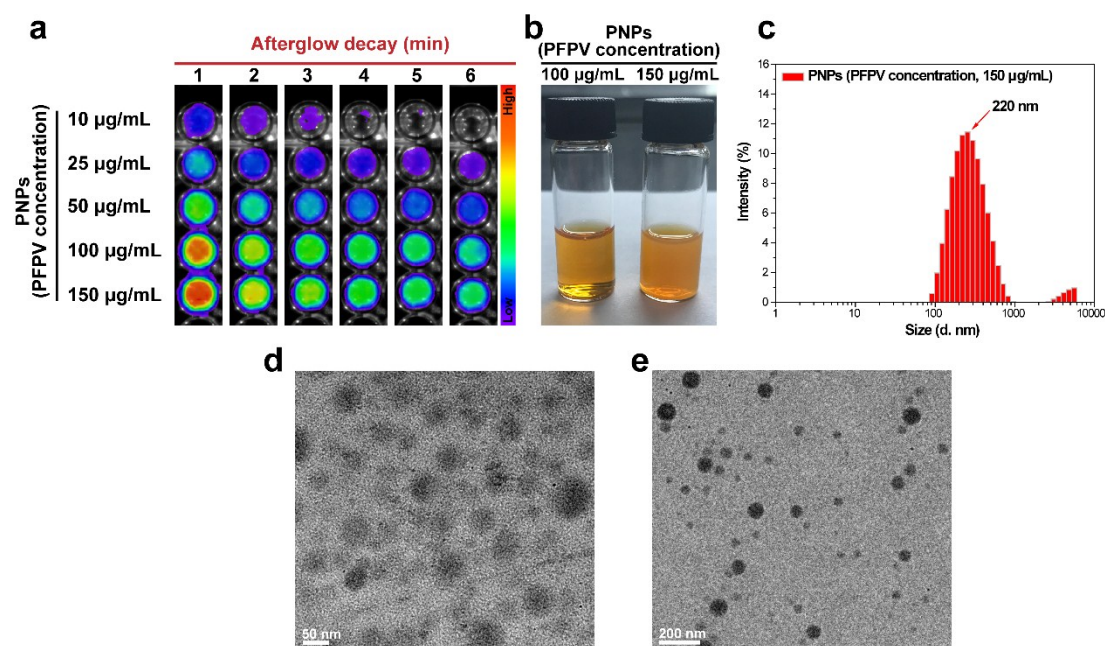


Figure S3. a) Afterglow luminescence images of PNP in H₂O (200 µL) with different PFPV concentration pre-irradiated by a white LED lamp (2000 lm). b) Digital pictures of PNP solution (PFPV concentration, 100 µg/mL and 150 µg/mL). c) DLS result of PNP at 150 µg/mL (PFPV concentration). d) TEM image of PNP. e) TEM image of TNPs.

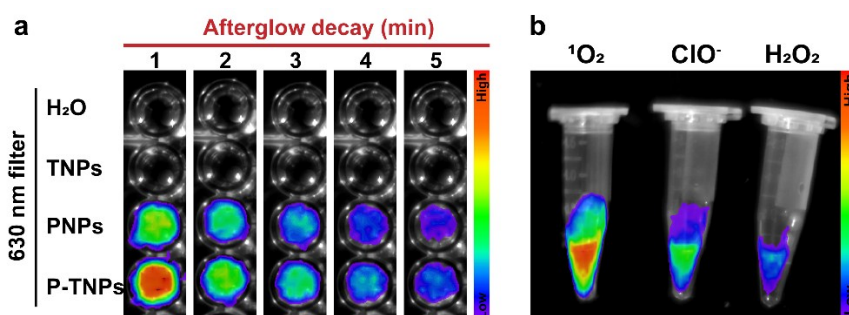


Figure S4. a) Afterglow luminescence images of H₂O, TNPs, PNP and P-TNP (200 µL, PFPV concentration 100 µg/mL, TTMN 10% w/w) pre-irradiated by a white LED lamp (2000 lm) and collected with a 630 nm filter. b) Luminescence images of PNP in the presence of ¹O₂, ClO⁻ and H₂O₂ agents. The final concentration of the three agents were all 10 mM which are prepared according to previous reports (*J. Am. Chem. Soc.*, 2016, 138, 10778-10781; *Anal. Chem.*, 2018, 90, 13714-13722).

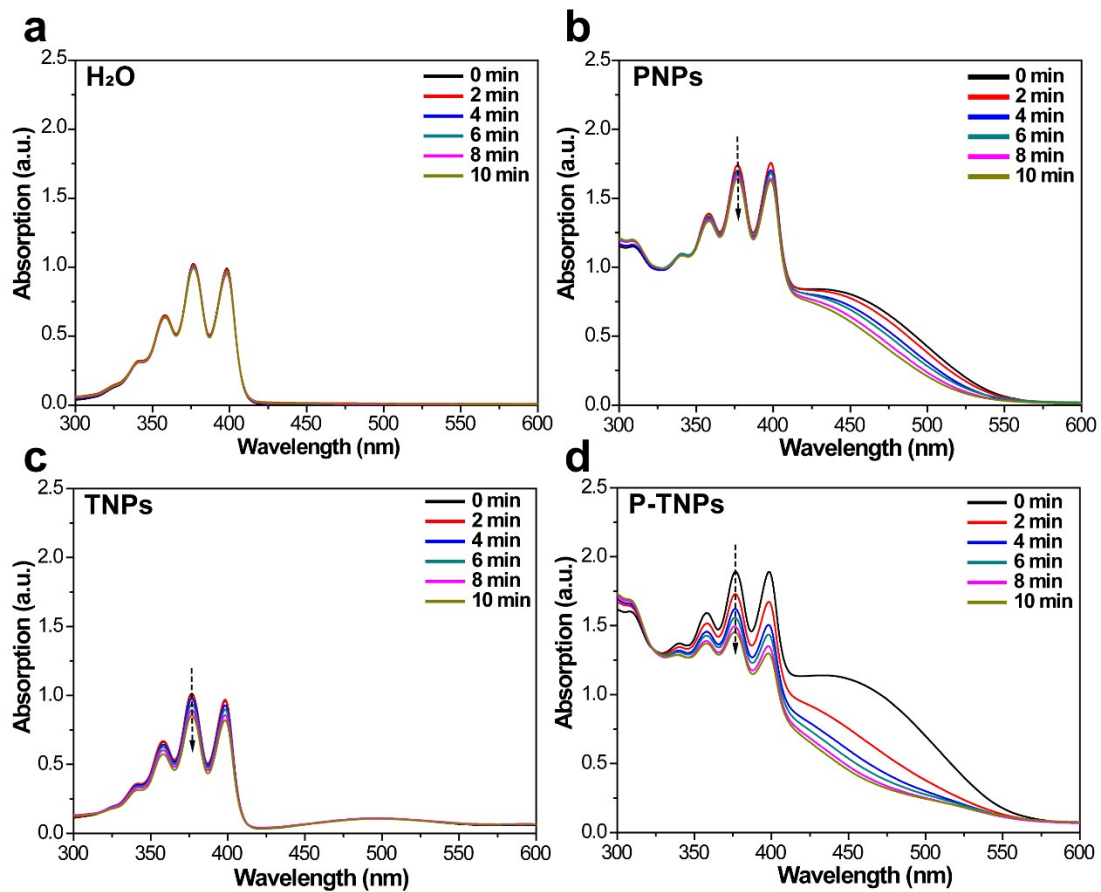


Figure S5. The absorption spectra of ABDA (20 μM) in a) H₂O, b) PNPs, c) TNPs and d) P-TNPs upon white LED lamp (2000 lm) irradiation for every 2 min.

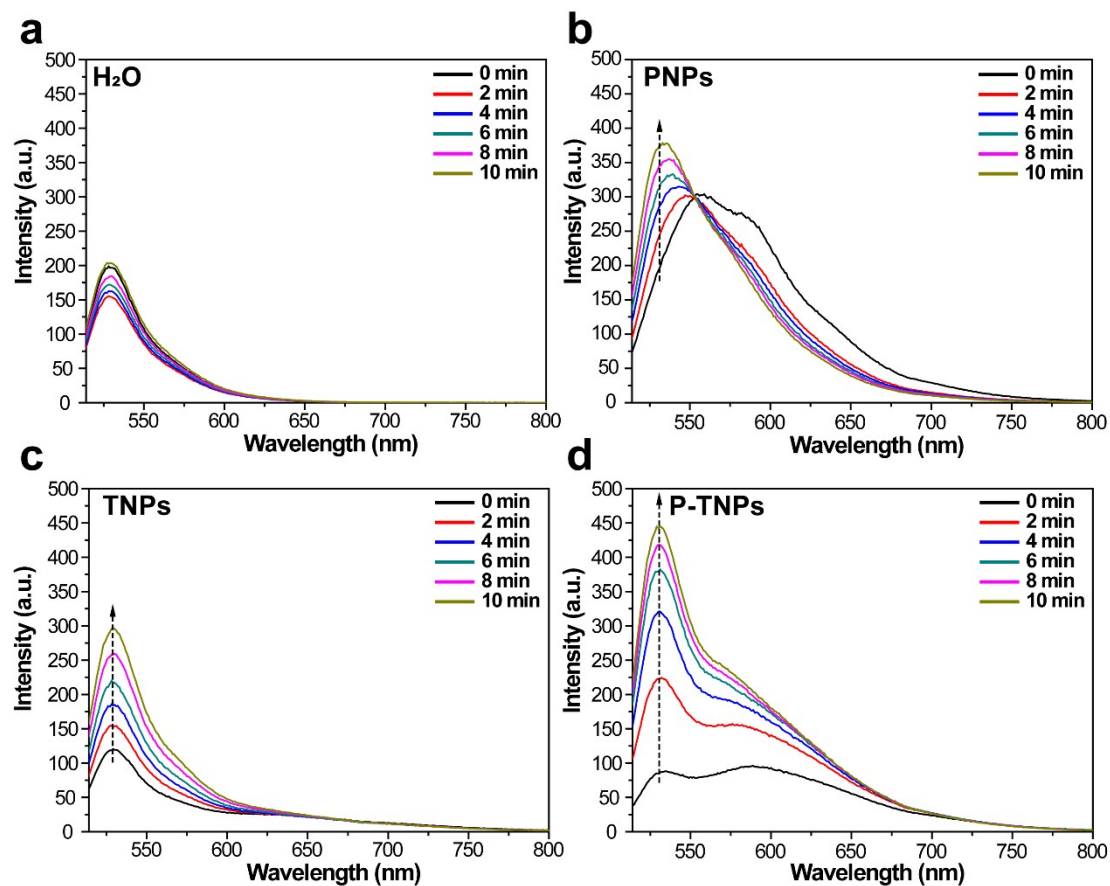


Figure S6. The fluorescence spectra of SOSG (2.4 μM) in a) H_2O , b) PNPs, c) TNPs and d) P-TNPs upon white LED lamp (2000 lm) irradiation for every 2 min.

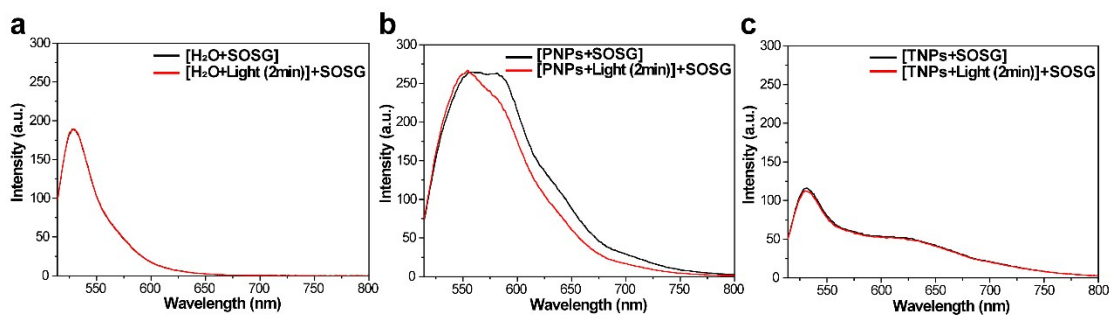


Figure S7. The fluorescence spectra of SOSG in a) H_2O , b) PNPs and c) TNPs solutions and SOSG added after those irradiated for 2 min (2000 lm).

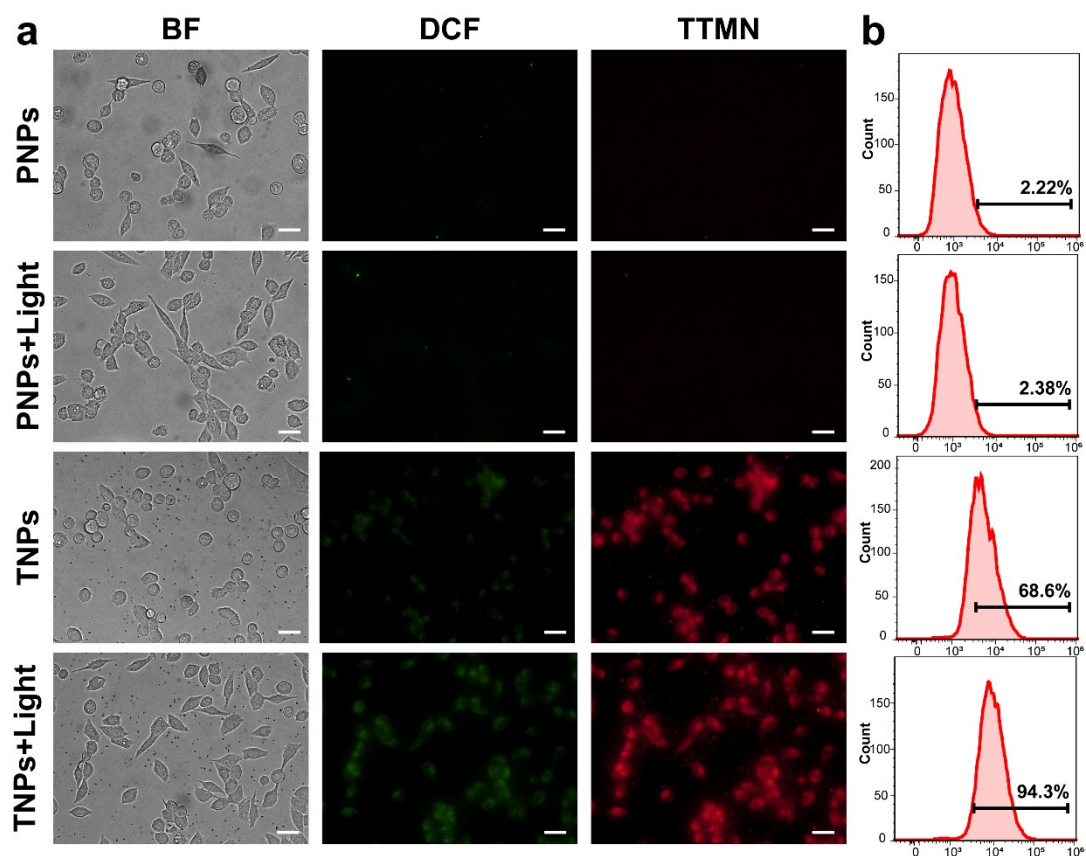


Figure S8. a) Intracellular ROS generation of PNPs and TNPs against 4T1 cells upon white light irradiation (2000 lm) for 3 min. Emission: BF (bright field), green from DCF, red from AIE dye (TTMN). Scale bar: 20 μm . b) Flow cytometry analysis of DCF fluorescence intensity in the corresponding groups.