

Supplementary material

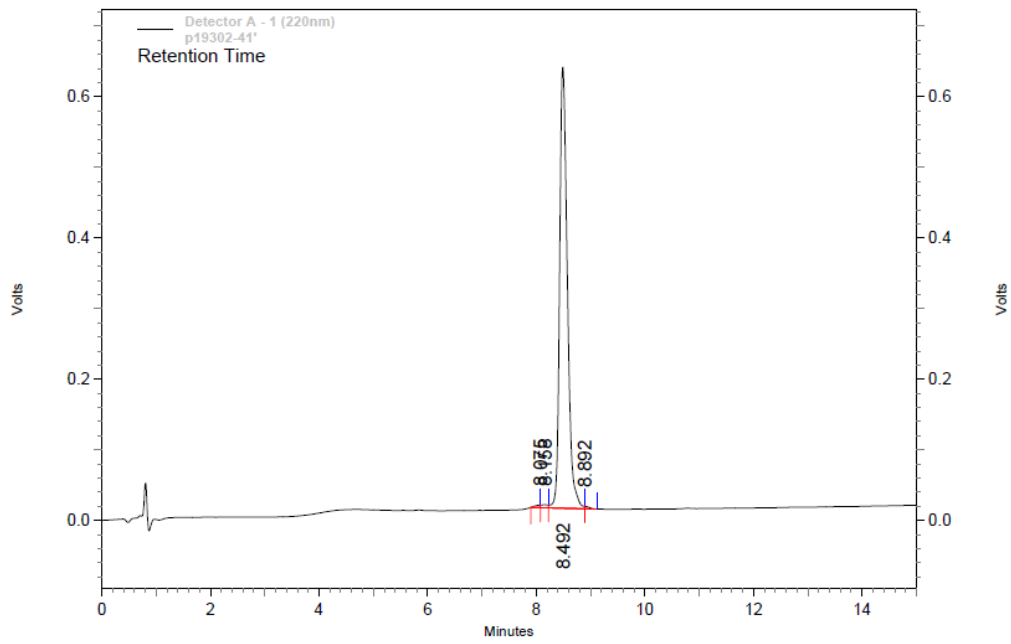
Photosensitizer-Conjugated Gold Nanorods for Enzyme-Activatable Fluorescence Imaging and Photodynamic Therapy

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Figure S1. Synthesis of MMP2P



Detector A - 1 (220nm)					
Pk #	Retention Time	Area	Area %	Height	Height %
1	8.075	23884	0.382	3568	0.561
2	8.158	36059	0.577	4287	0.674
3	8.492	6166717	98.699	624703	98.193
4	8.892	21324	0.341	3642	0.572
Totals		6247984	100.000	636200	100.000

Figure S2. HPLC of MMP2P

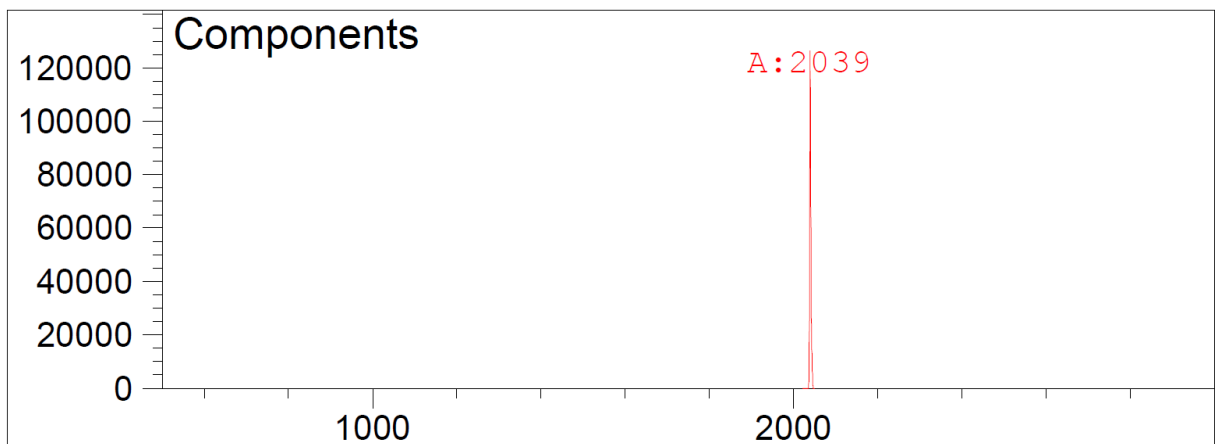


Figure S3. MALDI-TOF mass spectrum of MMP2P

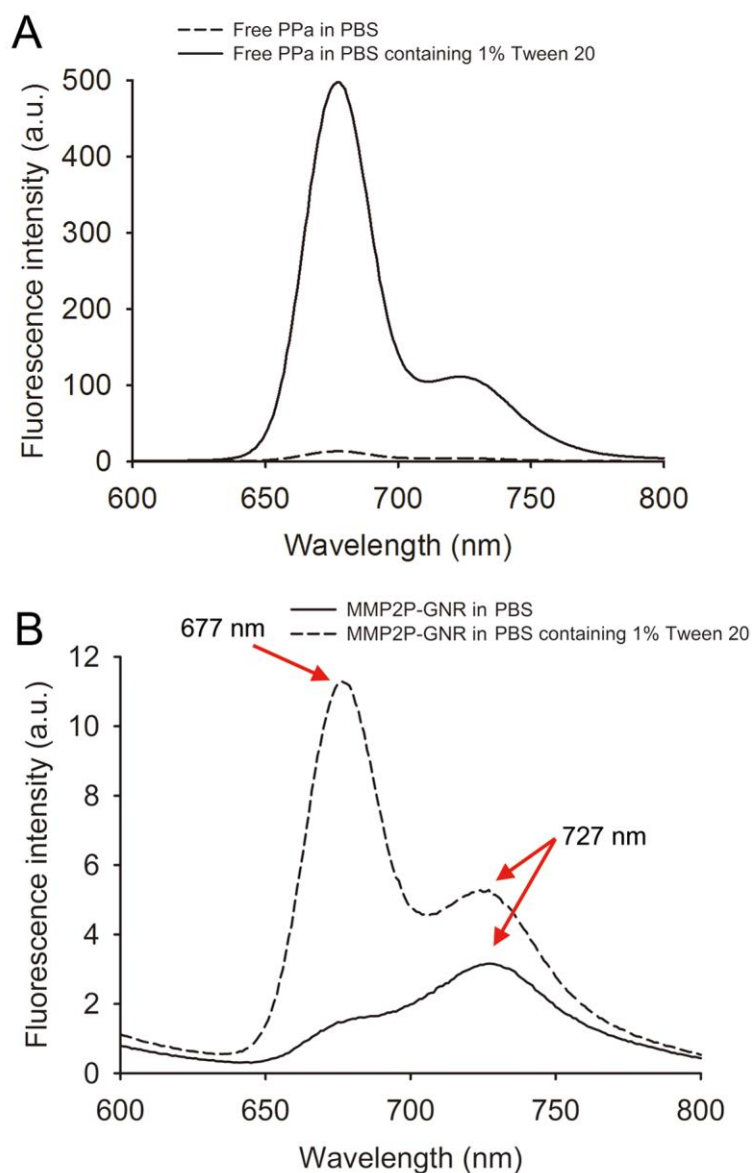


Figure S4. Fluorescence spectra of (A) free PPa and (B) MMP2P-GNR in different solutions (Ex. 410 nm). PPa and MMP2P-GNR were dissolved in either PBS or Tween 20-contained PBS. Final concentration of PPa in each solution was 1 μM . It is evident from fluorescence spectra of PPa that in an aqueous environment PPa shows significant aggregation due to limited solubility in water. Increase in fluorescence of MMP2P-GNR when dissolved in the surfactant-contained PBS indicates that quenching effect is partly due to self-quenching between the bound photosensitizers.

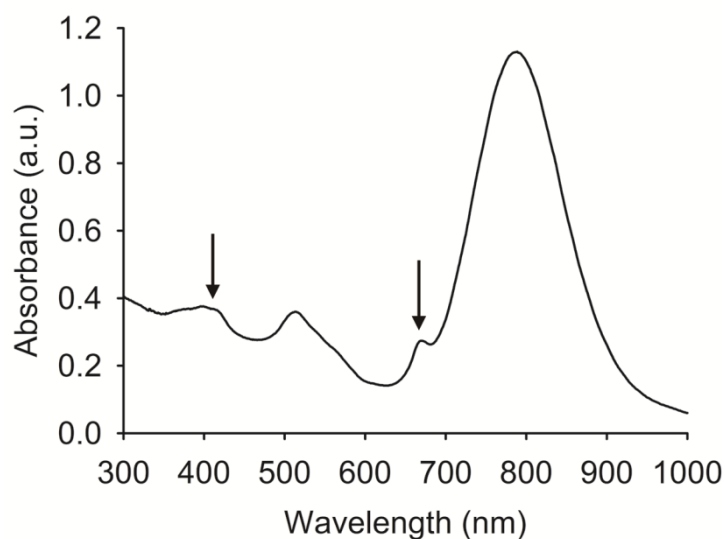


Figure S5. UV/Vis absorption spectrum of MMP2P-GNR in DMF. Arrows indicate absorption peaks corresponding to PPA.

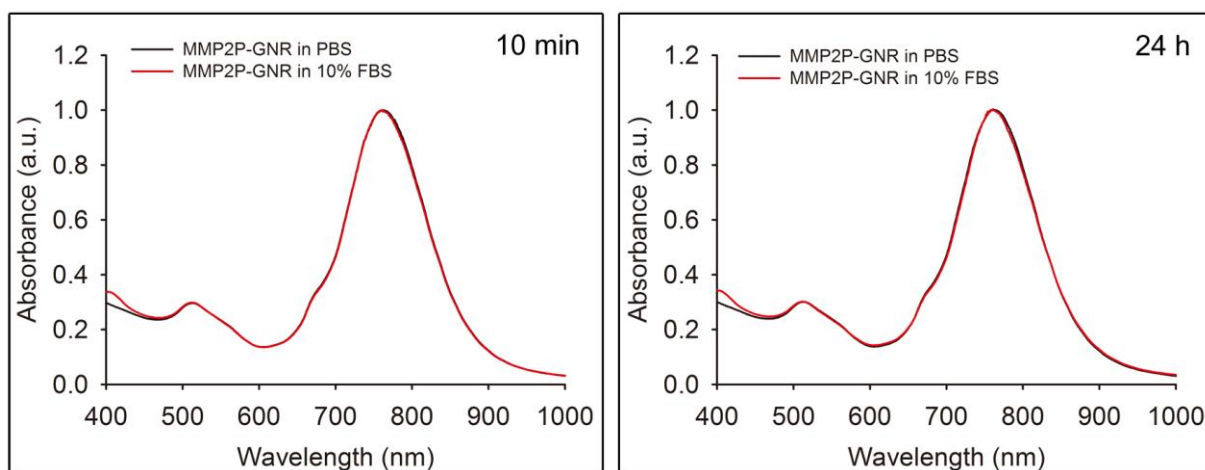


Figure S6. Dispersion stability of MMP2P-GNR. MMP2P-GNR (final particle concentration: 0.5 nM) was added to PBS and DMEM (without phenol red) containing 10% fetal bovine serum (FBS). The solutions were maintained at 25 °C and observed for 24 h. UV/Vis absorption spectra of the solutions were taken after 10 min and 24 h of incubation at 25 °C.