

Electronic Supplementary Information

Titania coated 2D gold nanoplates as nanoagents for synergistic photothermal/sonodynamic therapy in the second near-infrared window

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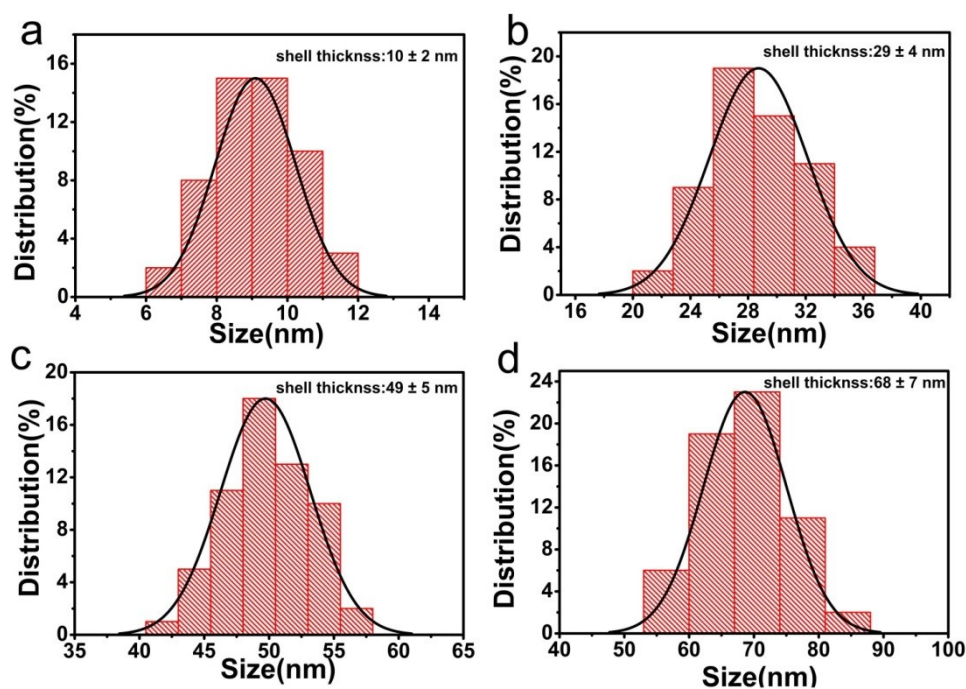


Figure. S1 (a-d) The size distributions of Au NPL@TiO₂-1 nanostructures, Au NPL@TiO₂-2 nanostructures, Au NPL@TiO₂-3 nanostructures and Au NPL@TiO₂-4 nanostructures.

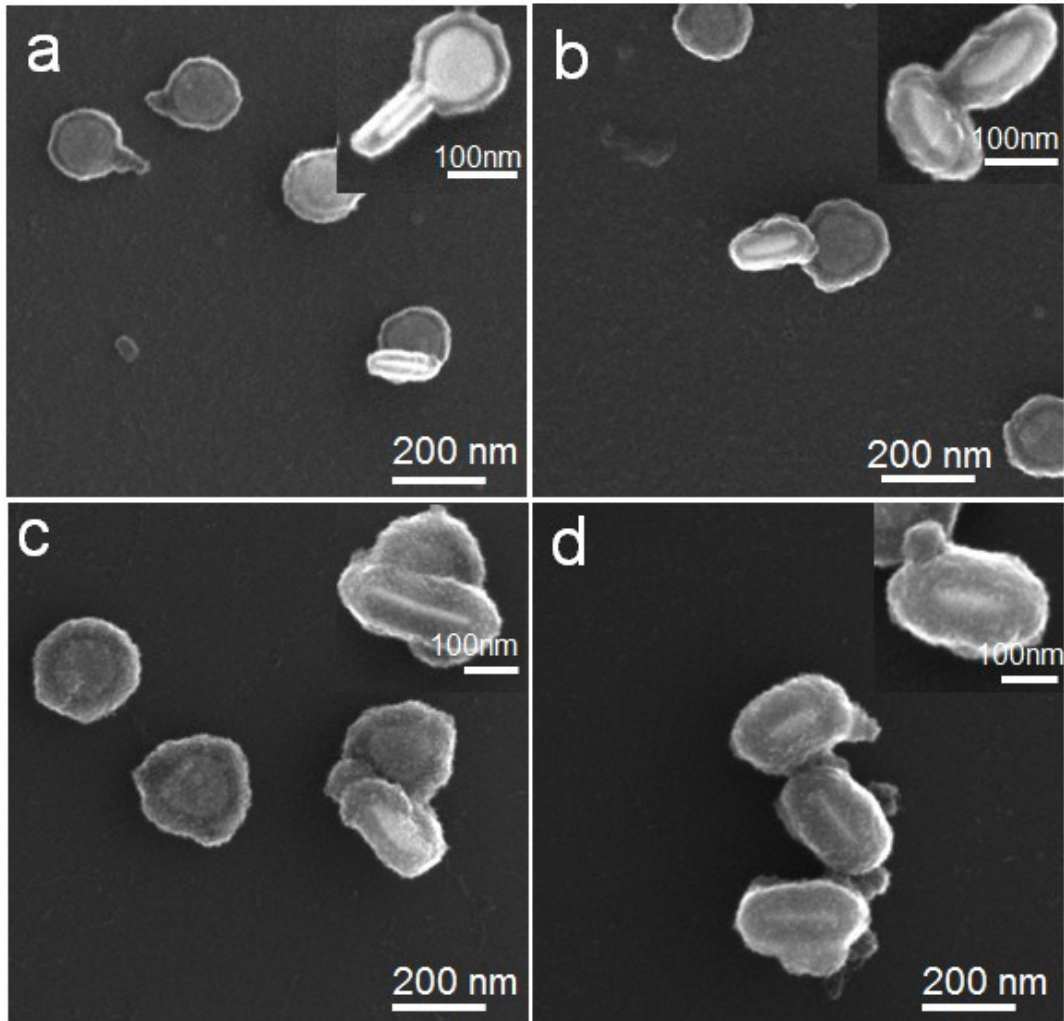


Figure. S2 (a-d) The representative SEM images of Au NPL@TiO₂ nanostructures with different heights (28 nm, 71.2 nm, 108 nm, 141 nm).

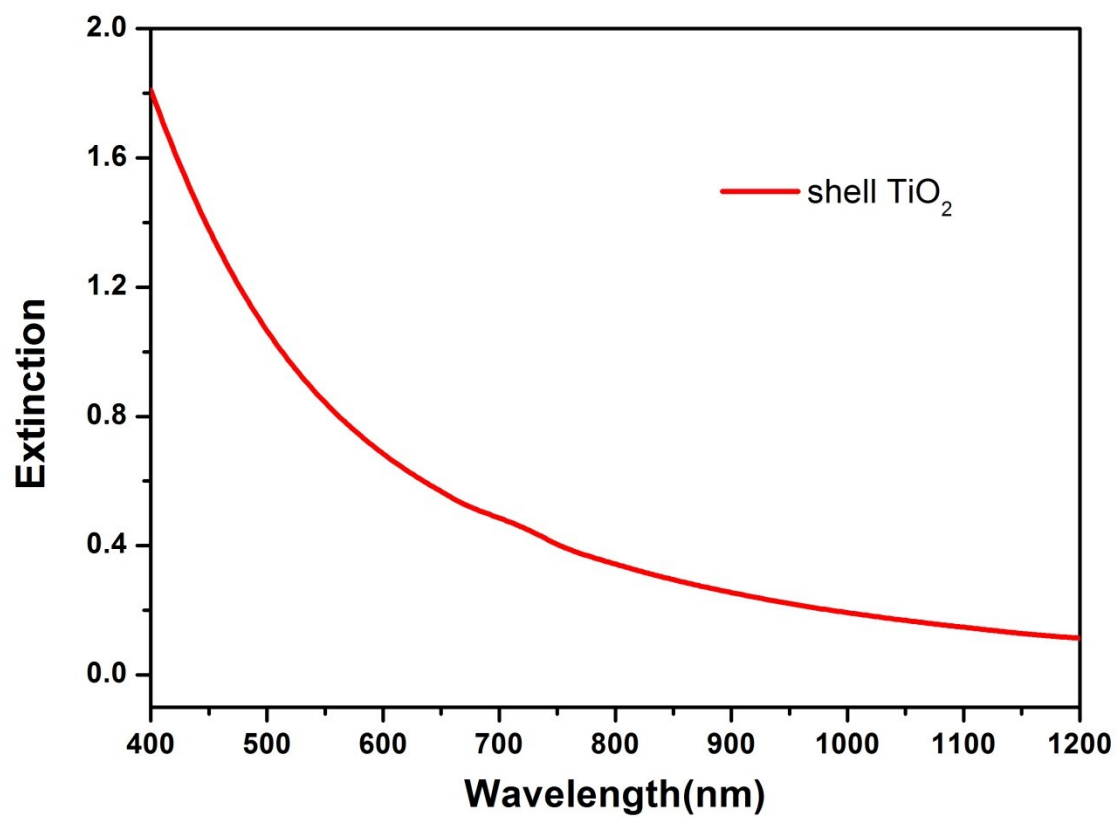


Figure. S3 The extinction spectrum of shell TiO₂ nanoparticles obtained from Au NPL@TiO₂-4 (shell thickness: 68 nm) nanostructures.

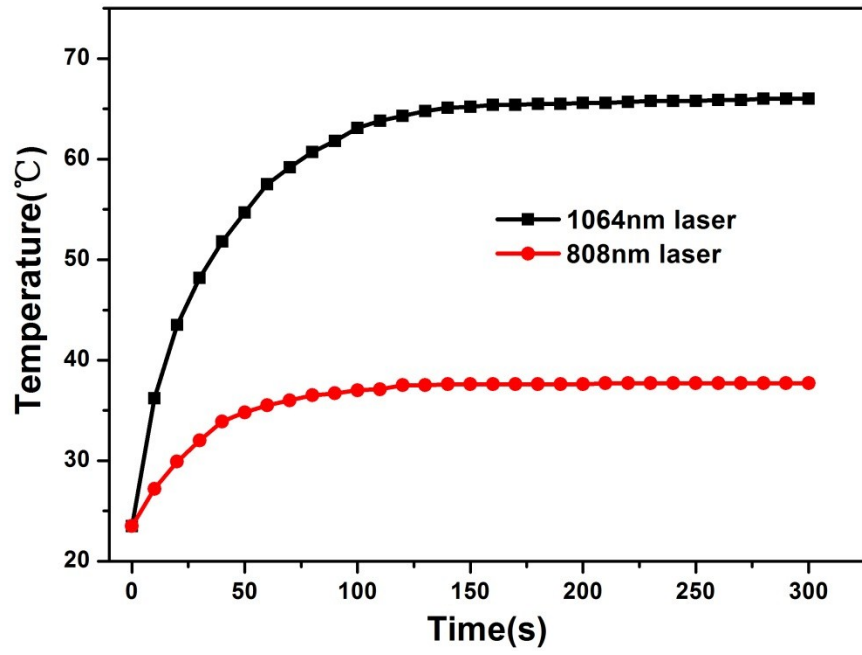


Figure. S4 The temperature change of Au NPL@TiO₂ irradiated by 1064 nm laser and 808 nm laser at the power density of 1 W cm⁻² for 5 min.

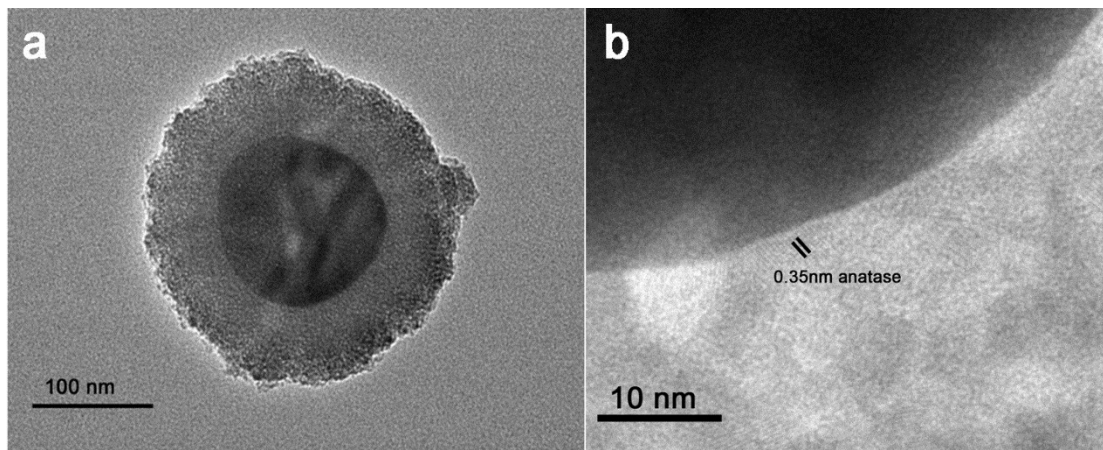


Figure. S5 Thermal treatment of the Au NPL@TiO₂ nanostructures sample (a)TEM and (b) HRTEM of Au NPL@TiO₂ nanostructures.

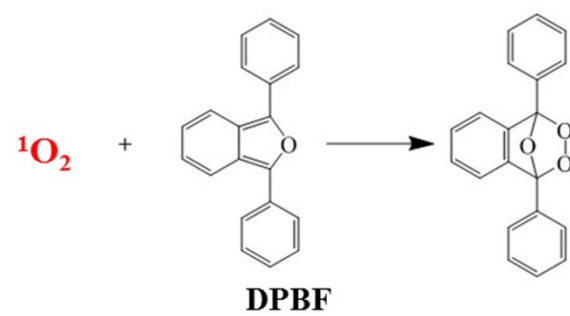


Figure. S6 Reaction between DPBF and $^1\text{O}_2$

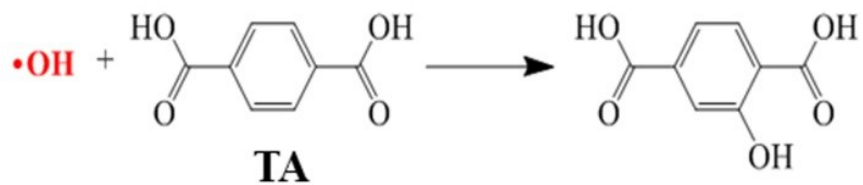


Figure. S7 Reaction between TA and $\bullet\text{OH}$. In the presence of $\bullet\text{OH}$, the fluorescence 2-hydroxy terephthalic acid was produced.

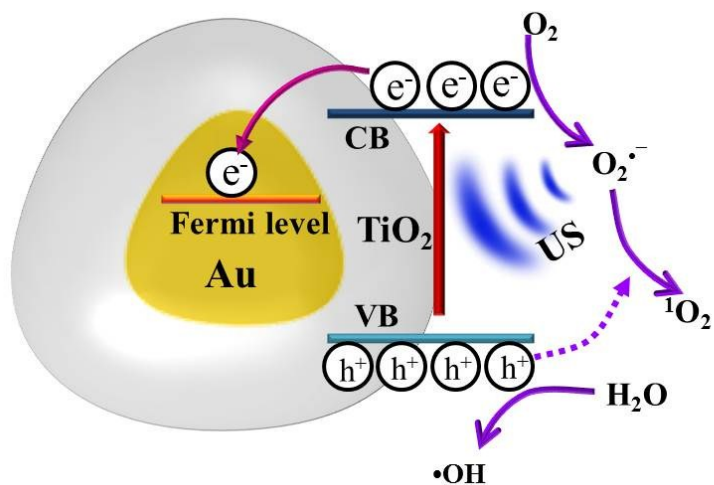


Figure. S8 The schematic illustration of the Au-enhanced SDT mechanism.

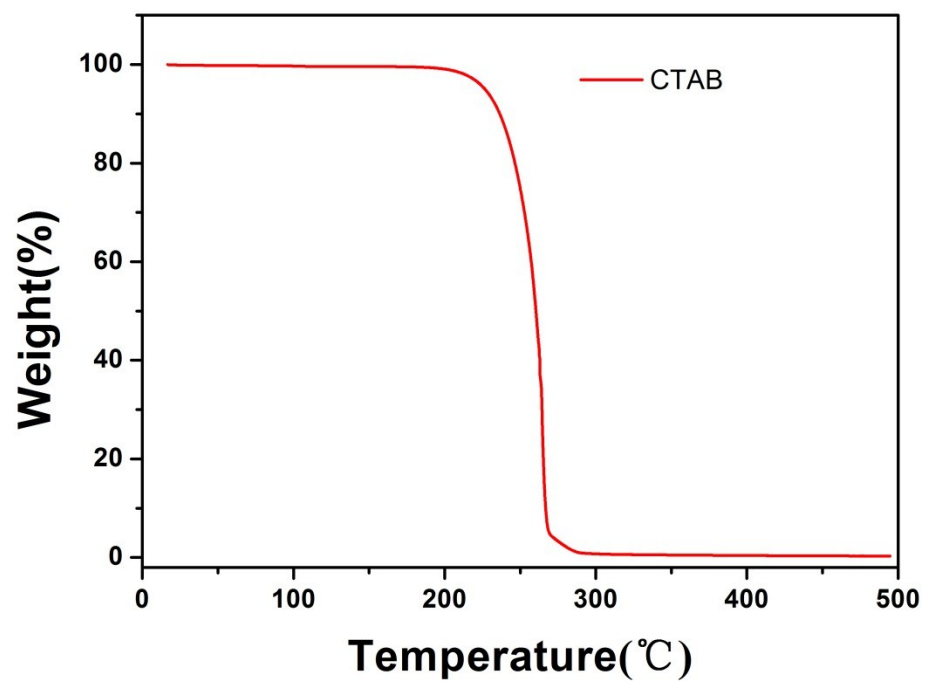


Figure. S9 The TGA curve of pure CTAB powder.