

Intelligent gold nanostars for *in vivo* CT imaging and catalase-enhanced synergistic photodynamic & photothermal tumor therapy

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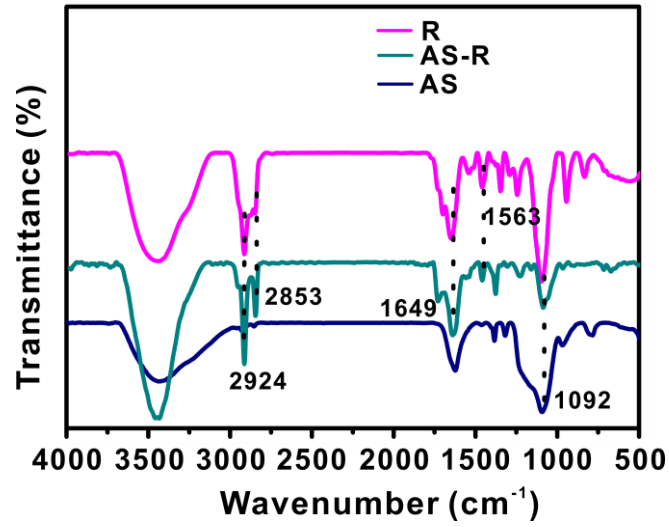


Figure S1. Infrared absorption spectra of AS-R, AS, and R.

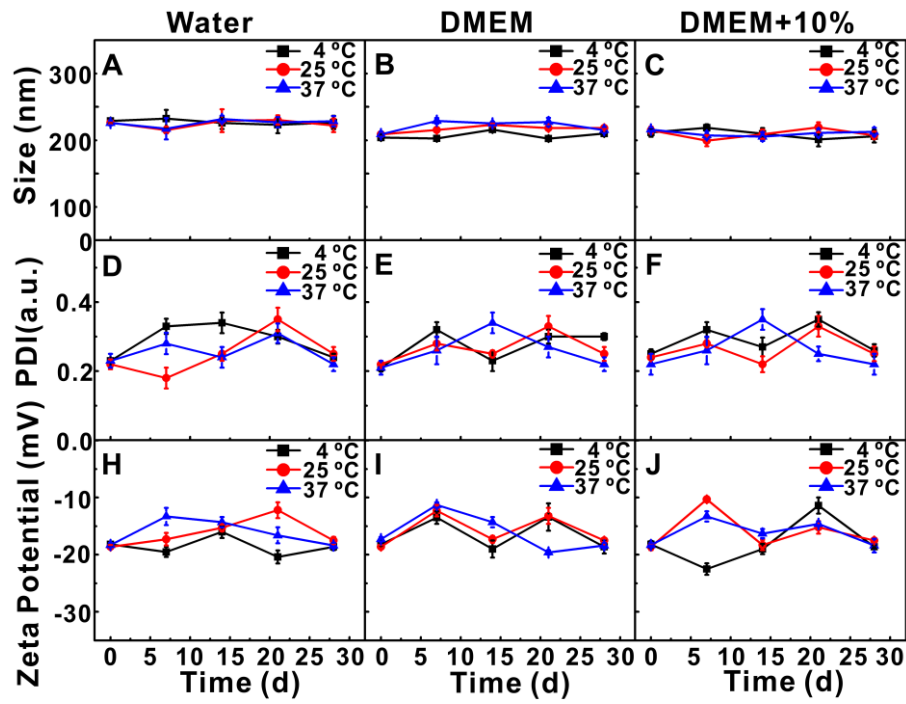


Figure S2. The particle size (A-C), dispersion PDI (D-F) and zeta potential of the ASCE-R probe in water, DMEM, and DMEM+10% serum changed with time (H-J).

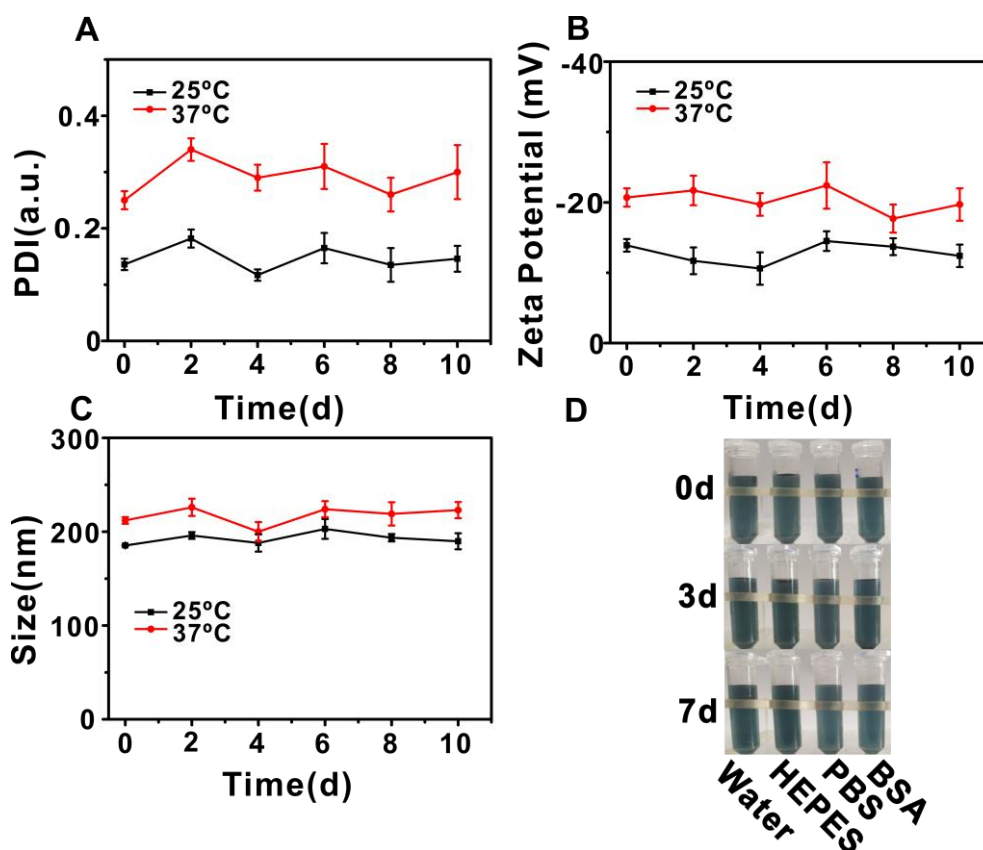


Figure S3. Changes in size (A), zeta potential (B) and PDI (C) of ASCE-R in PBS (pH=7.4) at 25 and 37 °C (n=3); digital photograph of ASCE-R in water, HEPES, PBS (pH=7.4), and bovine serum albumin at changed days (D).

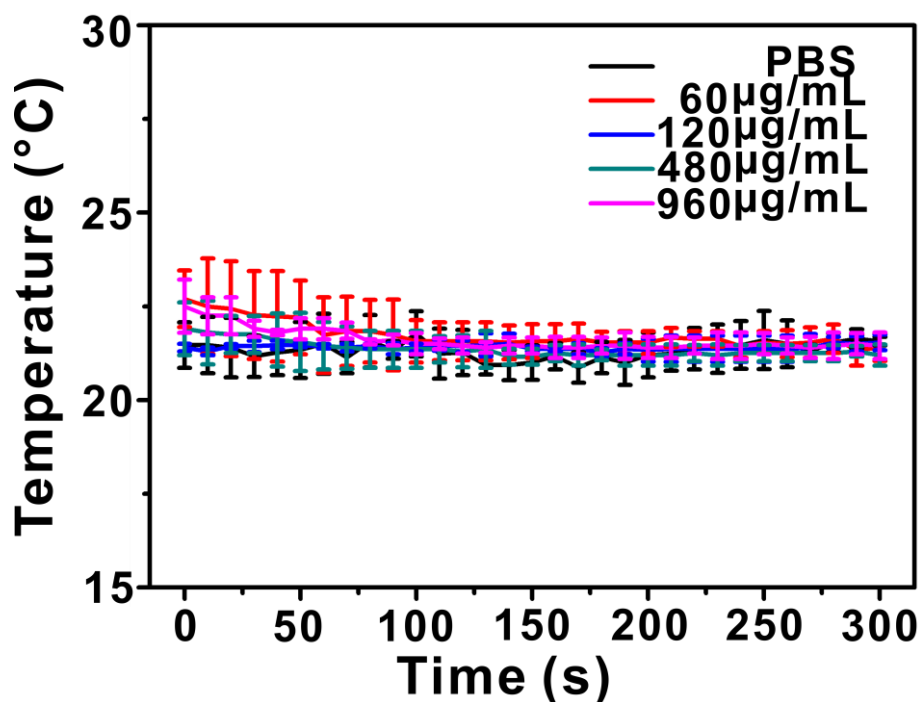


Figure S4. Temperature rise curves of ASCE-R with different concentrations irradiated by 660 nm laser (1.0 W/cm²).

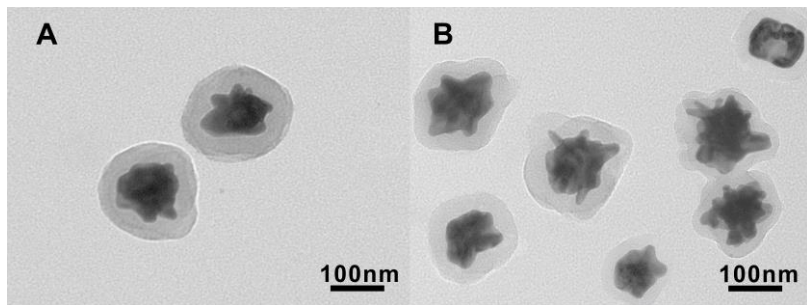


Figure S5. TEM of probe before (A) and after (B) irradiation at 808 nm laser (1 W/cm^2) for 3min, 660 nm laser (0.1 W/cm^2) for 8 min.