

Supplementary data

Ag-conjugated graphene quantum dots with blue light-enhanced singlet oxygen generation for ternary-mode high-efficient antimicrobial therapy

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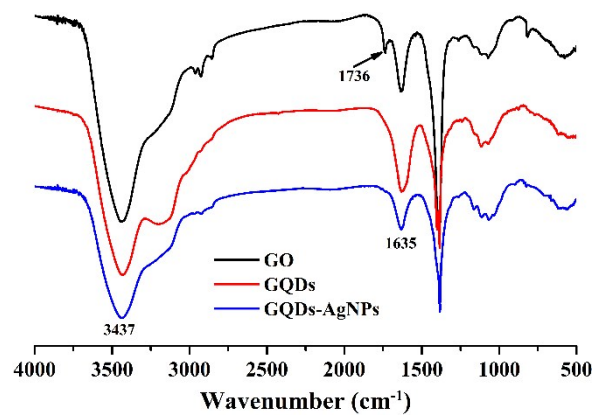


Figure S1. FTIR spectra of GO, GQDs and GQDs-AgNPs

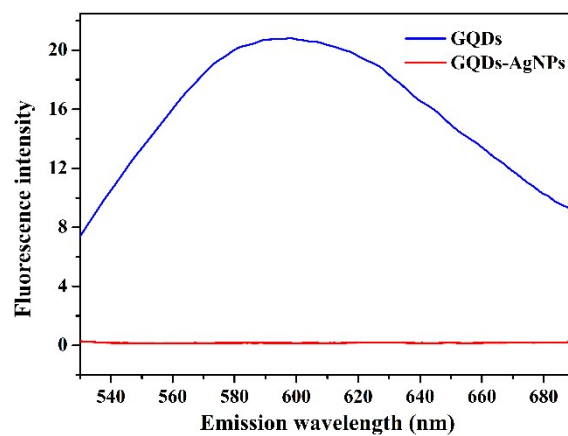


Figure S2. Fluorescence emission spectra of GQDs and GQDs-AgNPs

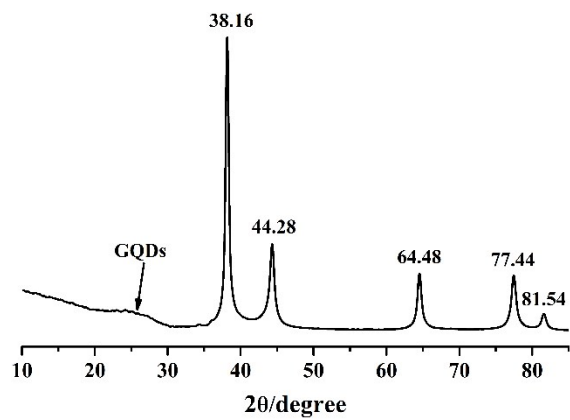


Figure S3. XRD pattern of GQDs-AgNPs.

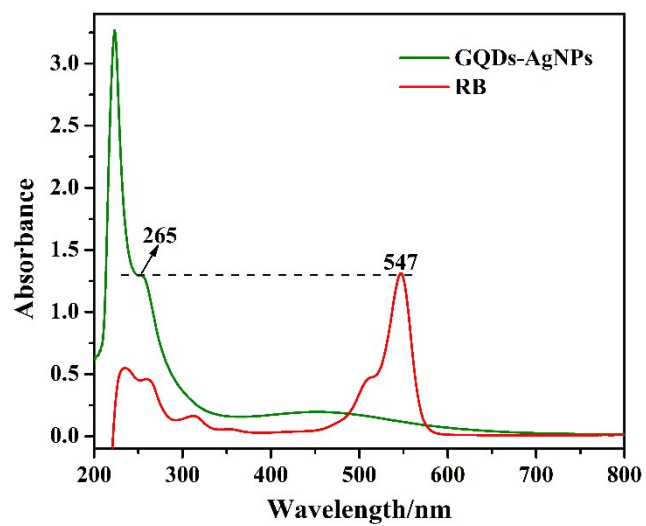


Figure S4. Absorption spectra of GQDs-AgNPs and RB in water solution.

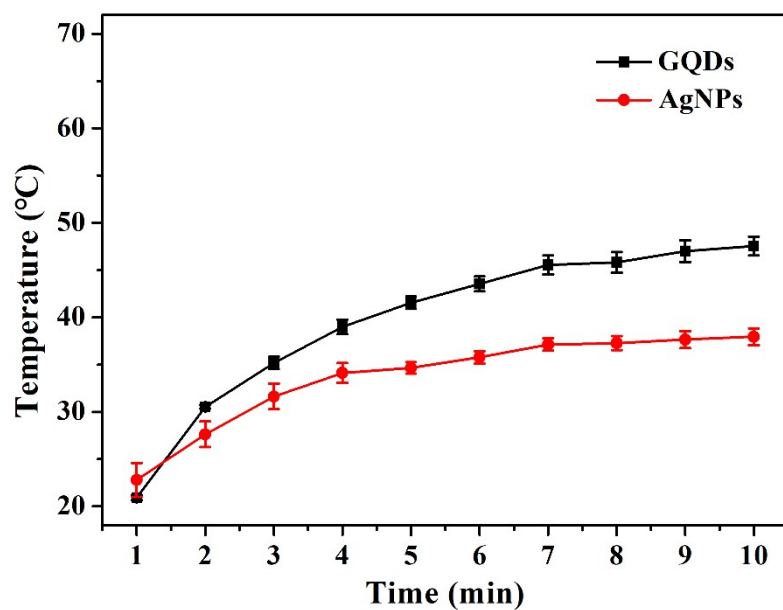


Figure S5. The heating curves of GQDs and AgNPs solutions exposed to light illumination (450 nm, 14.2 mW/cm²) recorded at different time intervals. Data are expressed as mean $\pm$ SD (n = 3).

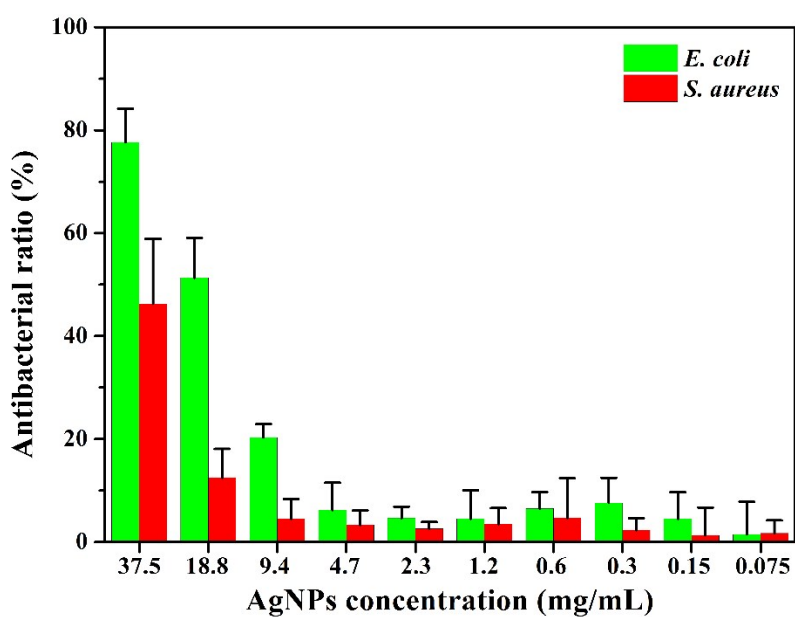


Figure S6. Antibacterial activity of AgNPs against *E. coli* and *S. aureus*.

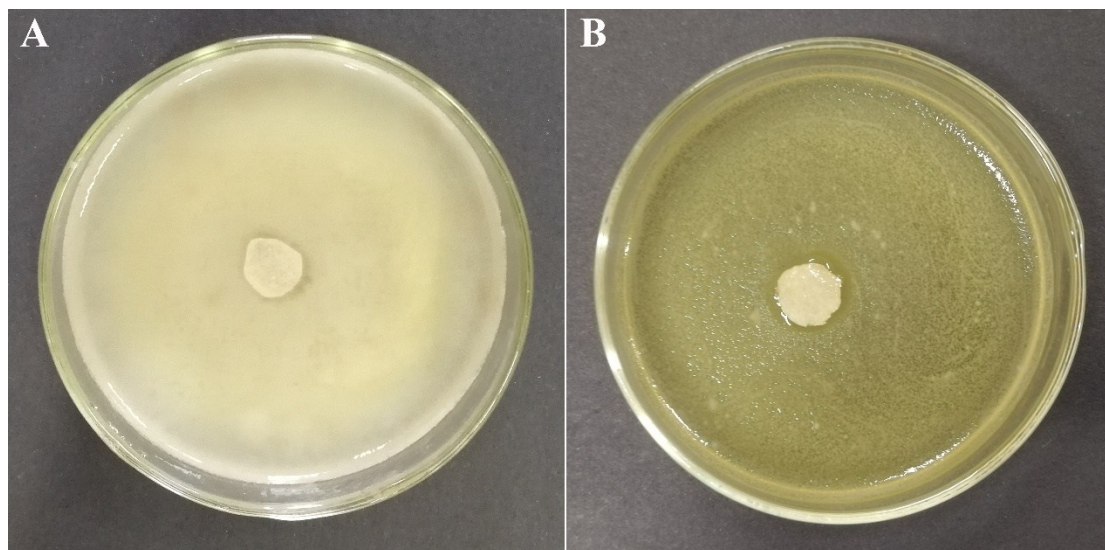


Figure S7. Inhibition zones of AgNPs against *E. coli* (A) and *S. aureus* (B) under 450 nm light irradiation (14.2 mW/cm^2) for 10 min.

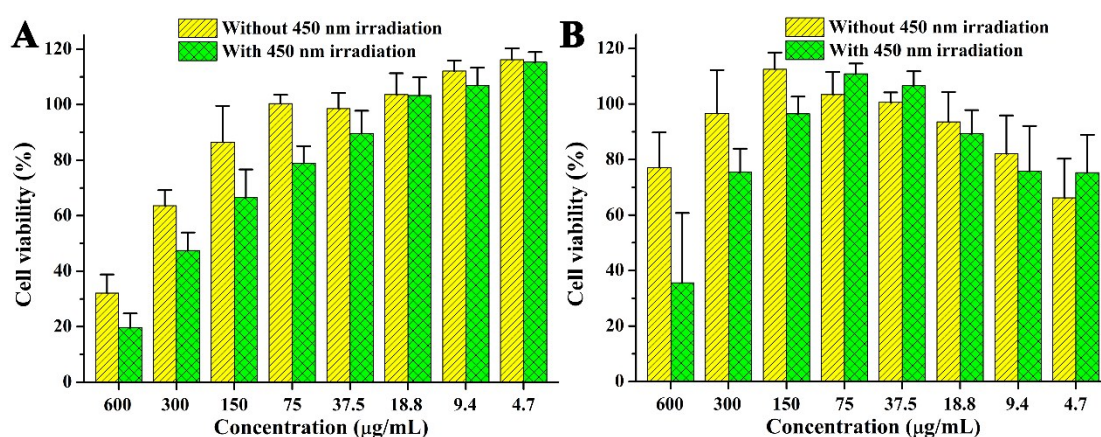


Figure S8. Cell viability of Raw264.7 cells after treatment with different dosages of GQDs-AgNPs for 48 h (A) and 72 h (B) with or without the light illumination (450 nm, 14.2 mW/cm^2) for 10 min.