Electronic Supplementary Material (ESI) for RSC Advances.

Smartphone-based Surface Plasmon Resonance Sensing Platform for Rapid Detection of Bacteria

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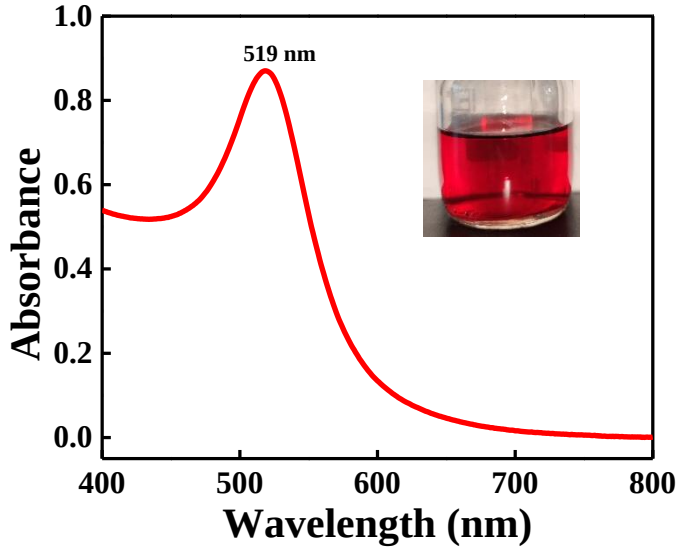

Figure S1 UV-VIS spectrum of the prepared AuNPs colloid.

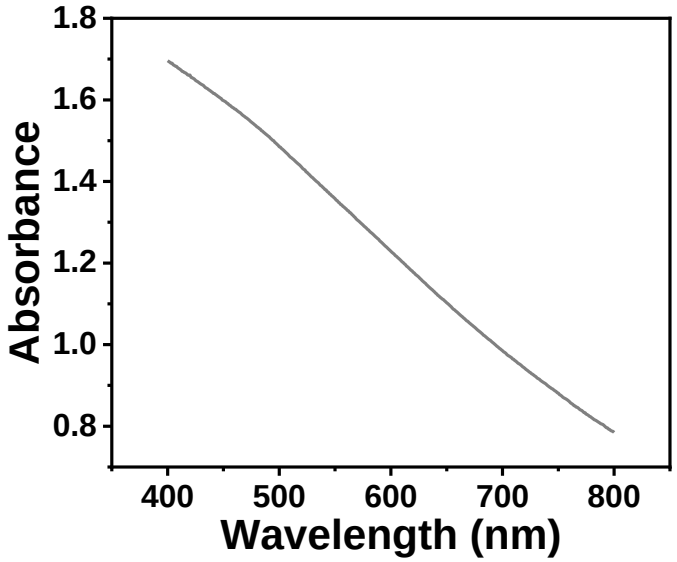

Figure S2 UV-VIS spectrum of the dead *E. coli* suspended in ultrapure water.

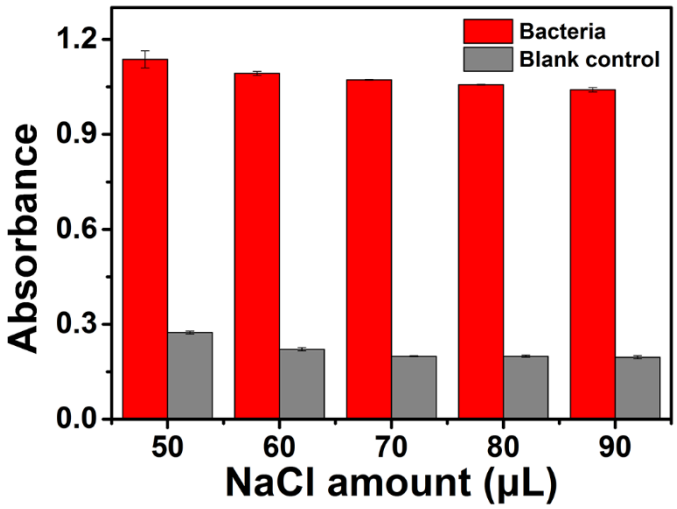

Figure S3 Influence of NaCl amount on the responsive color signal. The signal was recorded in the presence of 700 μL of AuNPs and 700 μL of bacteria suspension with OD600 equal to 1.0. The initial concentration of NaCl solution is 1.0 mol/L.

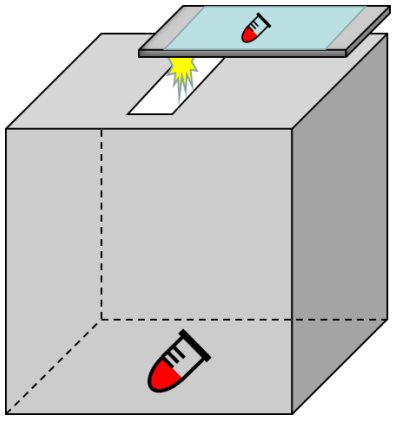

Figure S4 Illustration of smartphone-based imaging of bacteria/AuNPs color development.

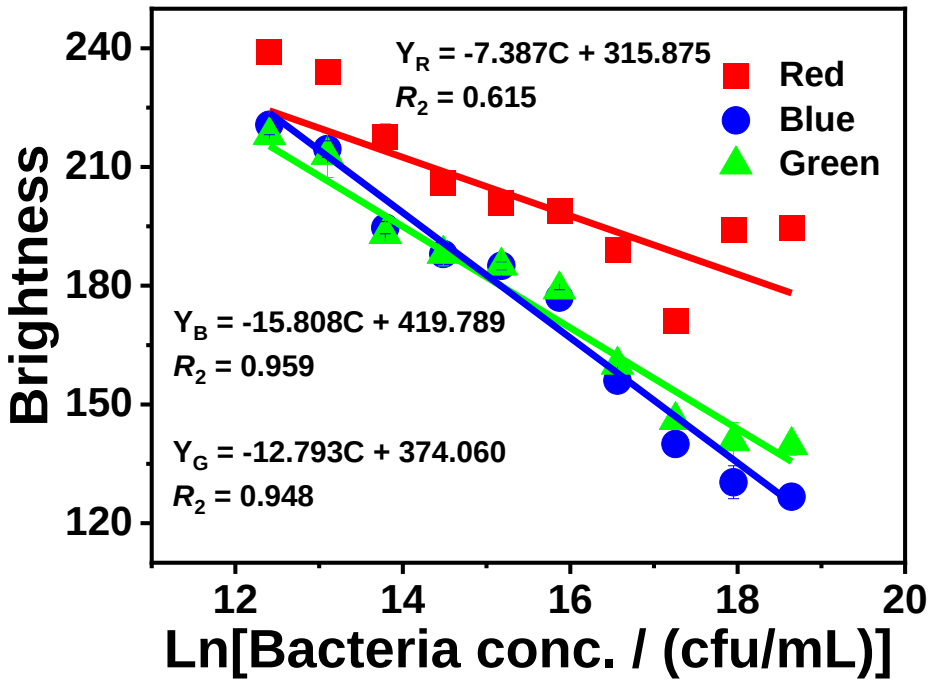

Figure S5 GRB signal of color-developed bacteria/AuNPs obtained with smartphone APP.

Table S1 Recovery of proposed sensing method in measuring bacteria-spiked water samples

Sample	Spiked bacteria (cfu/mL)	Recovery (%)	SD (%)
Tap water	5.0×10^8	95.4	3.75
Drinking water	5.0×10^8	85.7	4.66
Lake water	5.0×10^8	86.2	4.83