Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2022

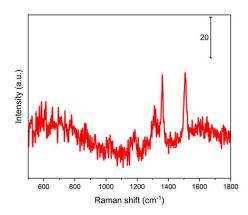


Fig S1. Raman spectra of R6G with a concentration of  $10^{-2}\,\mathrm{M}$ .

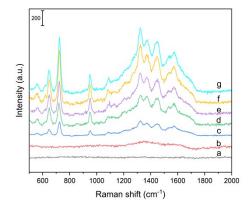


Fig.S2. SERS spectra of blank Ag NPs-filter paper substrate (a), Raman spectra of S.aureus(b) and SERS spectra of S.aureus with concentration of  $10^2$  CFU/mL(c),  $10^3$  CFU/mL(d),  $10^4$  CFU/mL(e),  $10^5$  CFU/mL(f), 106 CFU/mL(g).

.

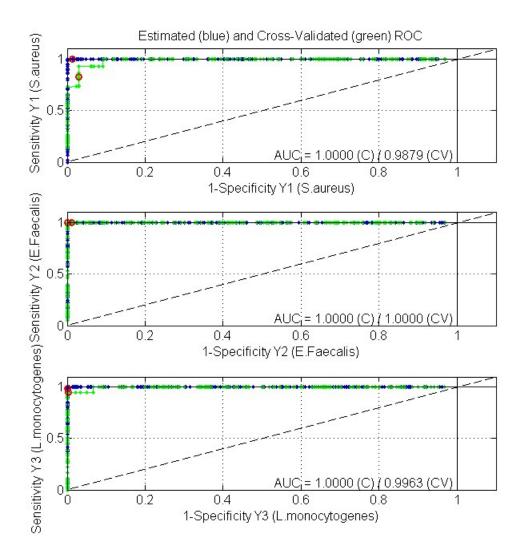


Fig.S3. ROC curves of discrimination results for three bacterial species generated from the PLS-DA analysis.