

Ultraviolet-induced *in situ* gold nanoparticles for point-of-care testing of infectious diseases in loop-mediated isothermal amplification

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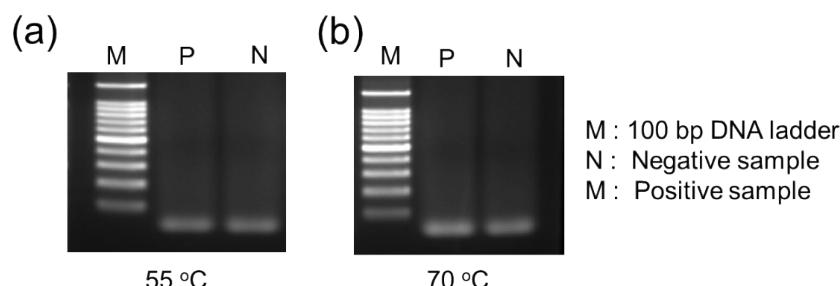


Fig. S1 Results of agarose gel electrophoresis for LAMP amplification performed at (a) 55 °C and (b) 70 °C.

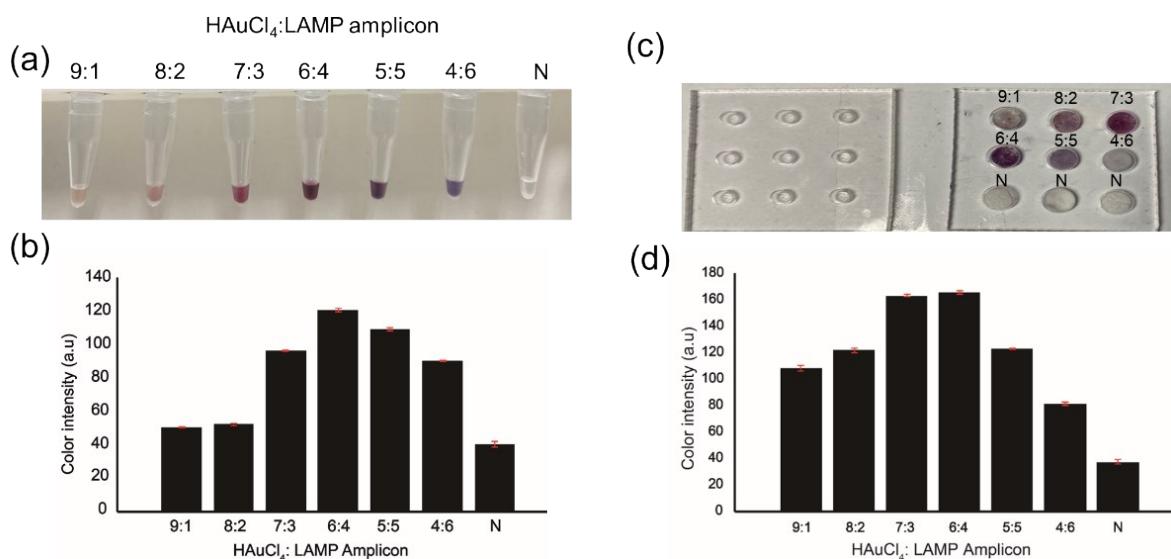


Fig. S2 Results of colorimetric detection showing the various volumes of HAuCl₄ on the displayed color when mixed with LAMP amplicons examined in the microtubes (a and b) and paper-based portable device (c and d).

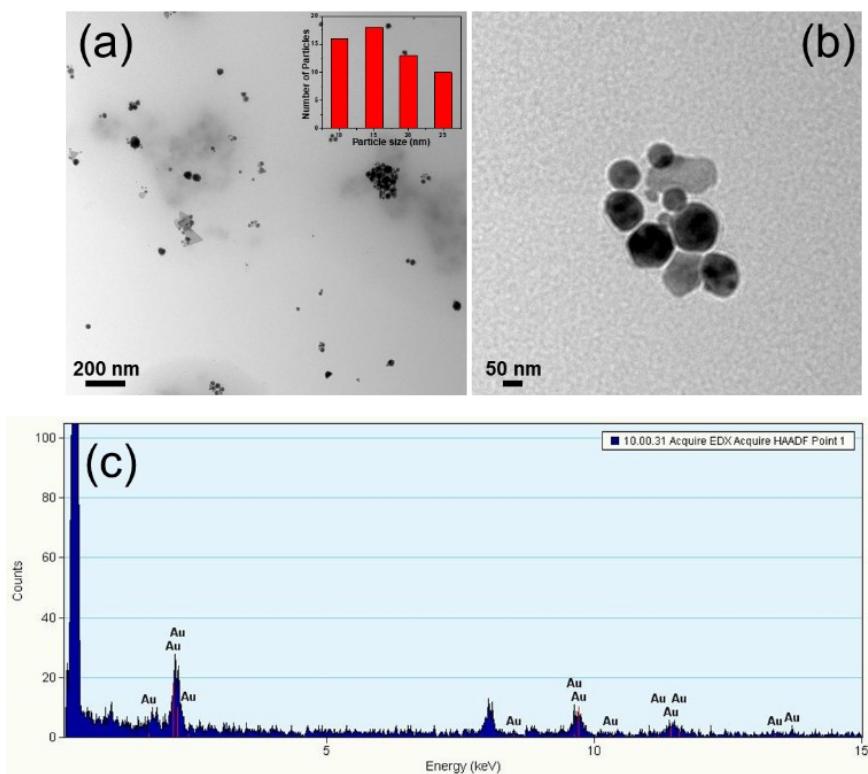


Fig. S3 (a, b) TEM images of AuNPs and (c) TEM-EDX image of AuNPs.

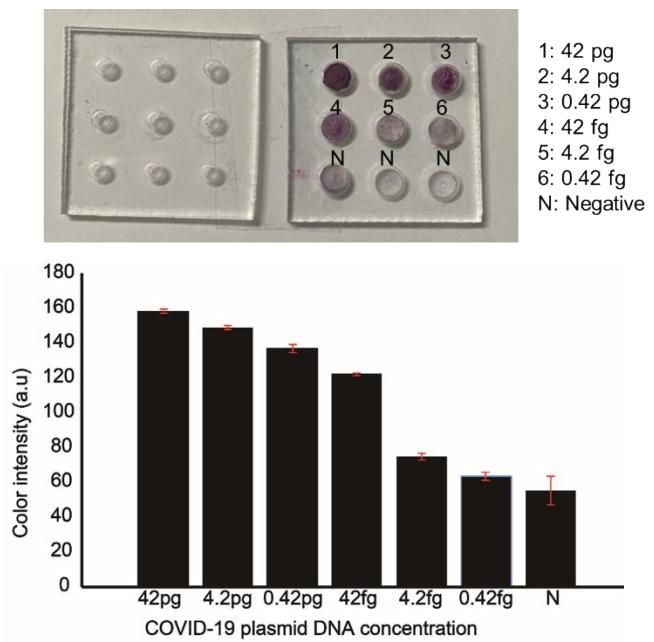


Fig. S4 Results of 10-fold serial dilution of COVID-19 plasmid DNA observed using a paper-based portable device.

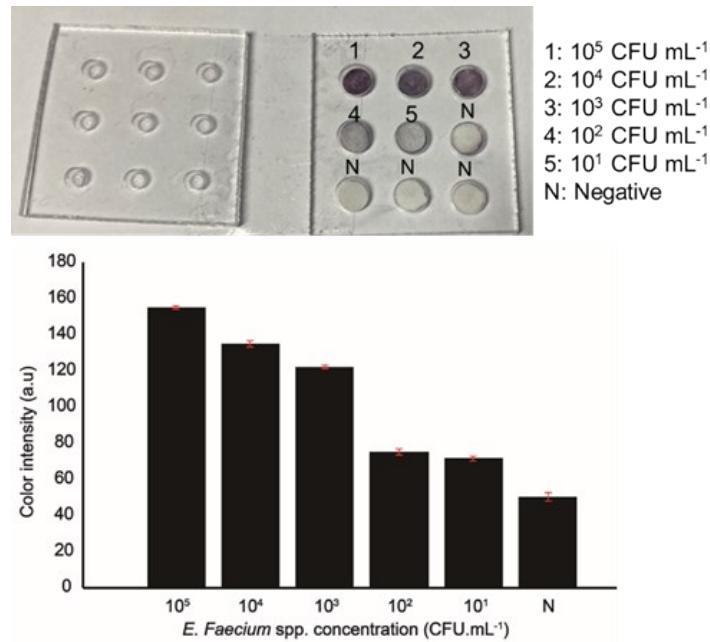


Fig. S5 Results of 10-fold serial dilution of *E. faecium* spp. observed using a paper-based portable device.

Table S1 Primers used for amplifying *Enterococcus faecium* spp (esp gene)

Primers	Sequences (5'-3')
F3	CCAGAACACTTATGGAACAG
B3	GTTGGGCTTTGTGACCTG
FIP	CGTGTCTCGCTCTTCTTTATTTGCAAGATATTGATGGTG
BIP	ATCGGGAAACCTGAATTAGAAGAAGAACCTGTGGATGAATACTTTC
LB	TGATGTTGACACAACAGTTAAGGG

Table S2 Primers used for amplifying COVID-19 plasmid DNA

Primers	Sequences (5'-3')
F3	GAAACCGGCACCCGTGATC
B3	GGAGCTGTTCAGGTTCTCA
FIP	TCAGGATAGCCAGGGTCACCAAGTGAACCTCCGTGCTGCTGT
BIP	CGCTCTGAGACTGTGCGCTTCGGGCTGTACACGTAGA
LF	AGGAACACCAACGAAGGCC
LB	ACTGCTGCAACATCGTGAACa