

Supplementary Materials

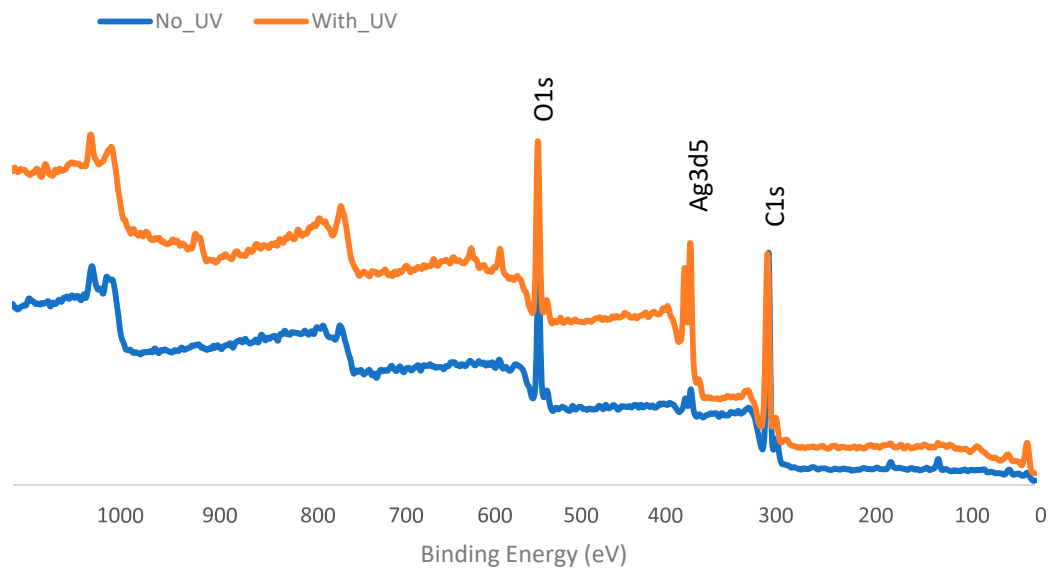


Fig S1. XPS spectra of PVA-Ag and PVA-UV of spectral region 0-1000 eV.

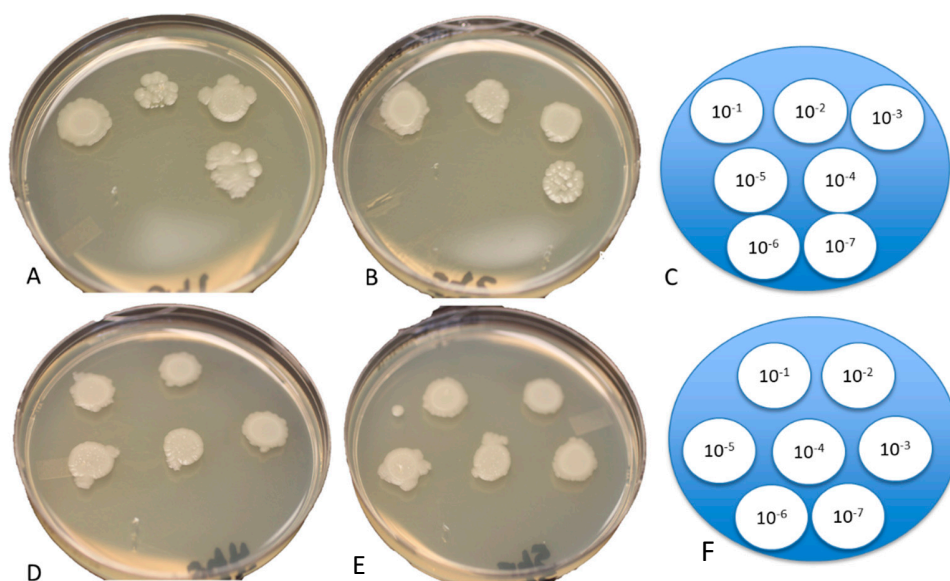


Fig S2. Bacteria plating following incubation with membrane embedded with silver (A) 1 hour post exposure, (B) 2 hours post exposure, (D) 4 hours post exposure and (E) 5 hours exposure, and maps of dilution colonies (C and F).

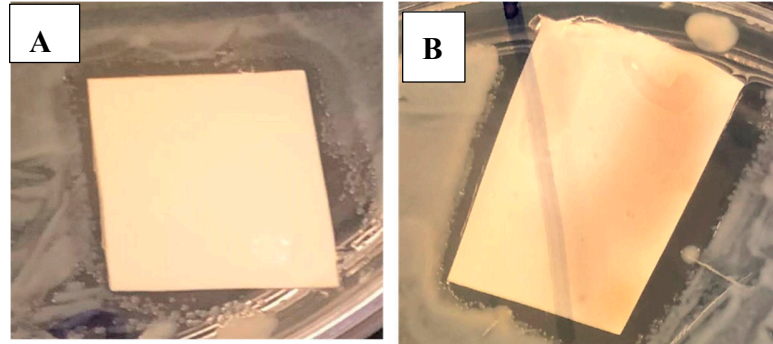


Fig S3. Anti-bacteria effect on *E. coli* with membrane without membrane (A) and embedded with silver (B).