

Figure S1. TEM images of *R. solanacearum* in the presence of CuONPs at (a) 0, (b) 125 $\mu\text{g mL}^{-1}$, (c) 250 $\mu\text{g mL}^{-1}$ and (d) 250 $\mu\text{g mL}^{-1}$ concentrations. (c) mainly represented the damaged cell structure and (d) mainly represented the absorption of CuONPs by bacterial cells (indicated by the arrows). Original image from Chen et al. [37]. The description of the image has been kept in its original form.

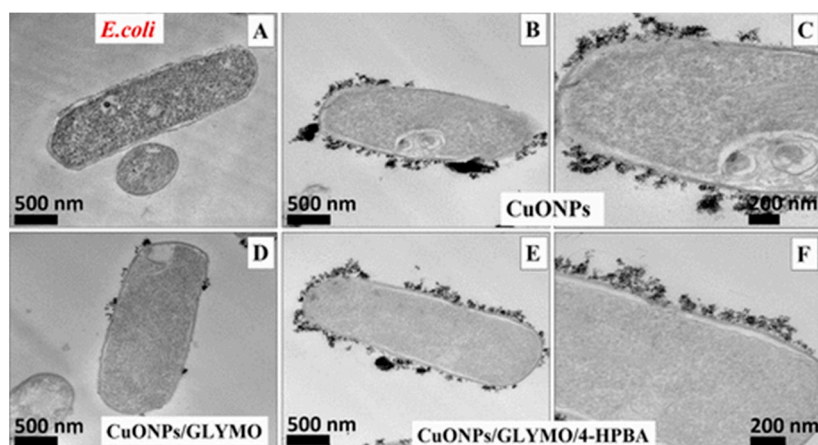


Figure S2. TEM images of *E. coli* at different magnifications: (A) before treatment and (B, C) after treatment with 25 $\mu\text{g mL}^{-1}$ bare CuONPs, (D) 25 $\mu\text{g mL}^{-1}$ CuONPs/GLYMO, and (E, F) 25 $\mu\text{g mL}^{-1}$ CuONPs/GLYMO/4-HPBA, all for 6 h. Original image from Halbus et al. [40]. The description of the image has been kept in its original form.

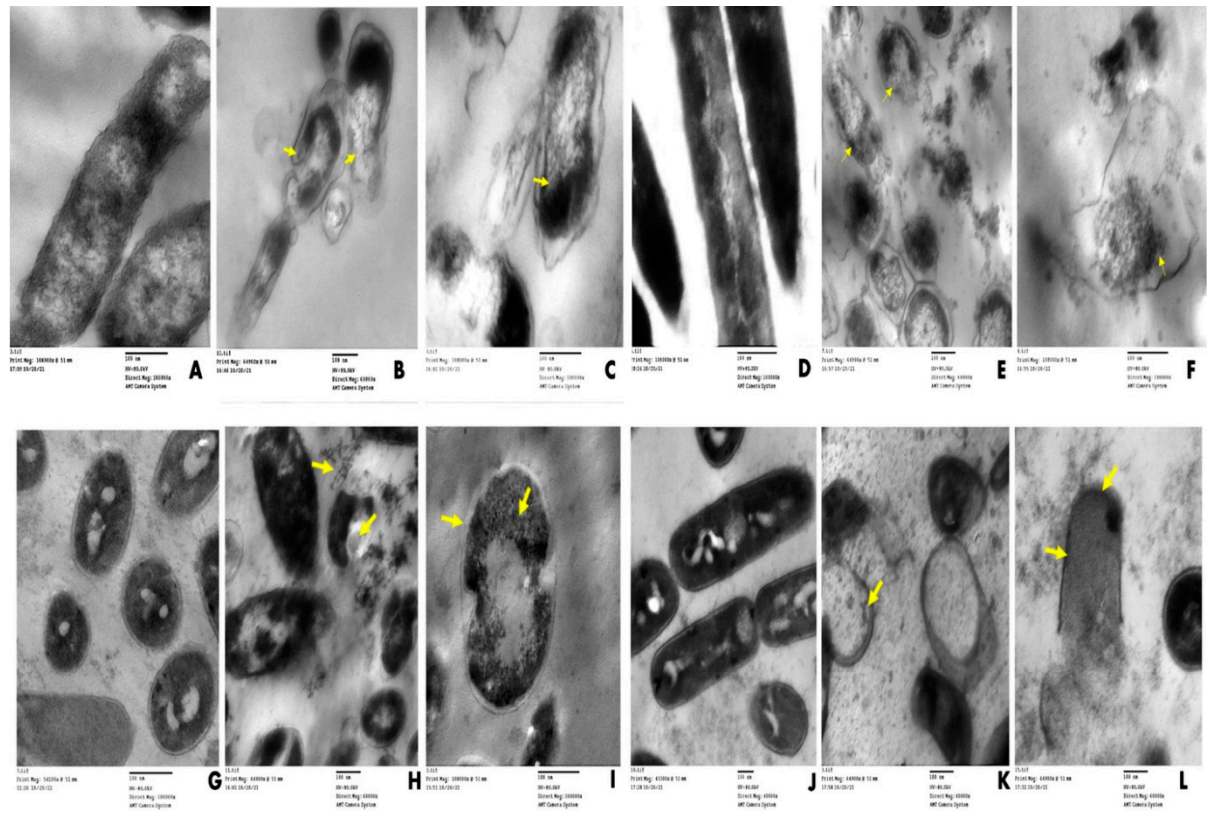


Figure S3. Transmission electron microscopy images of bacterial strains treated with CuONPs. *Escherichia coli* (A) control; (B and C) *Escherichia coli* affected by CuONPs ($2 \times \text{MIC}$); *Bacillus cereus* (D) control; (E and F) *Bacillus cereus* affected by CuONPs ($2 \times \text{MIC}$); *Staphylococcus aureus* (G) control; (H and I) *Staphylococcus aureus* affected by CuONPs ($2 \times \text{MIC}$); *Klebsiella oxytoca* (J) control; *Klebsiella oxytoca* (K and L) affected by CuONPs ($2 \times \text{MIC}$); scale bar = 100 nm. Original image from Shehabeldine et al. [79]. The description of the image has been kept in its original form.