

Supporting information

Table S1: NLTA-CuNPs upon prolonged treatment causes impairment in cell membrane integrity.

Treatments	Absorbance at different time intervals			
	0 h		3 h	
	260 nm	280 nm	260 nm	280 nm
NLTA-CuNPs	0.208	0.166	0.903	0.649
Triton X	3.146	2.821	3.355	2.963
Untreated	0.173	0.146	0.486	0.349

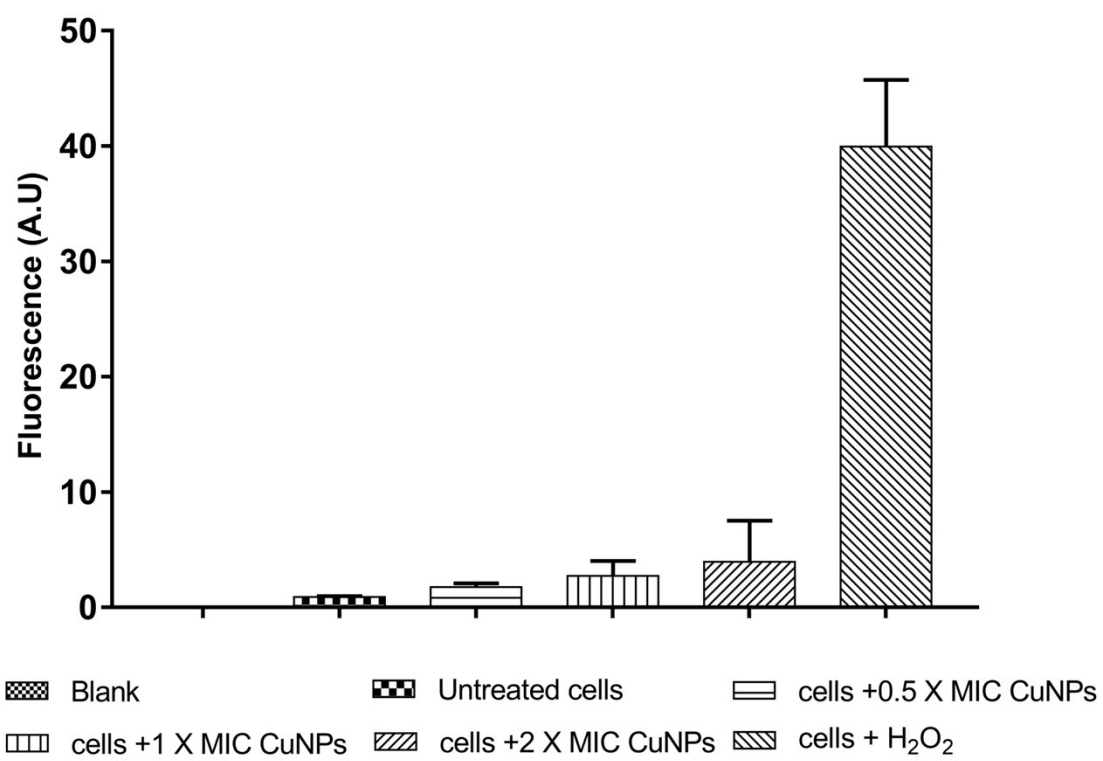


Fig S1: NLTA-CuNPs could not induce oxidative damage in *E.coli*

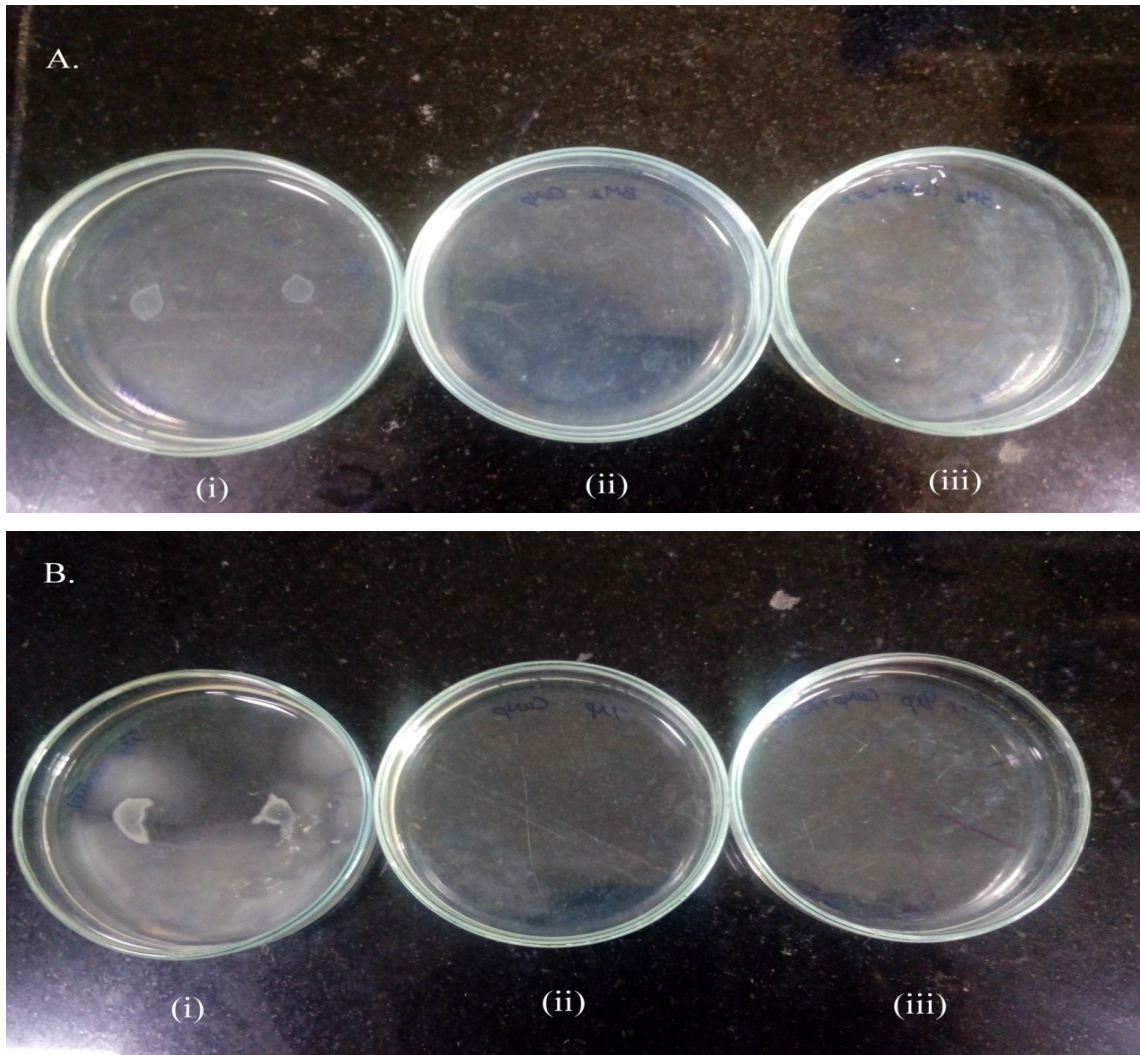


Fig. S2. Swimming motility was evaluated on tryptone plates containing 0.3 % agar and swarming motility was assessed on modified BM2 glucose plates containing 0.5 % agar. Plates were incubated for 18 -24h photographs were taken and either halo diameter for swimming or swarm area was assessed i) Untreated ii) NLTA- CuNPs iii) NLTA- CuNPs + EDTA

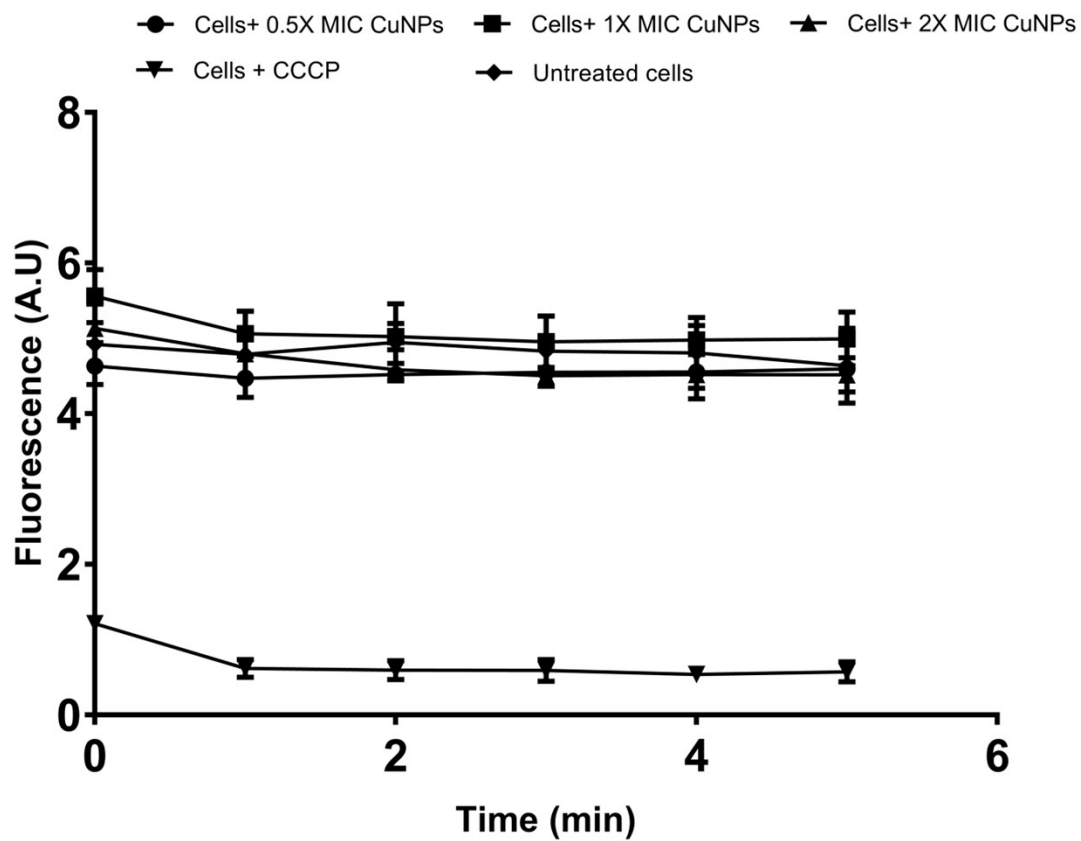


Fig. S3: NLTA-CuNPs does not perturb membrane potential in *E. coli*

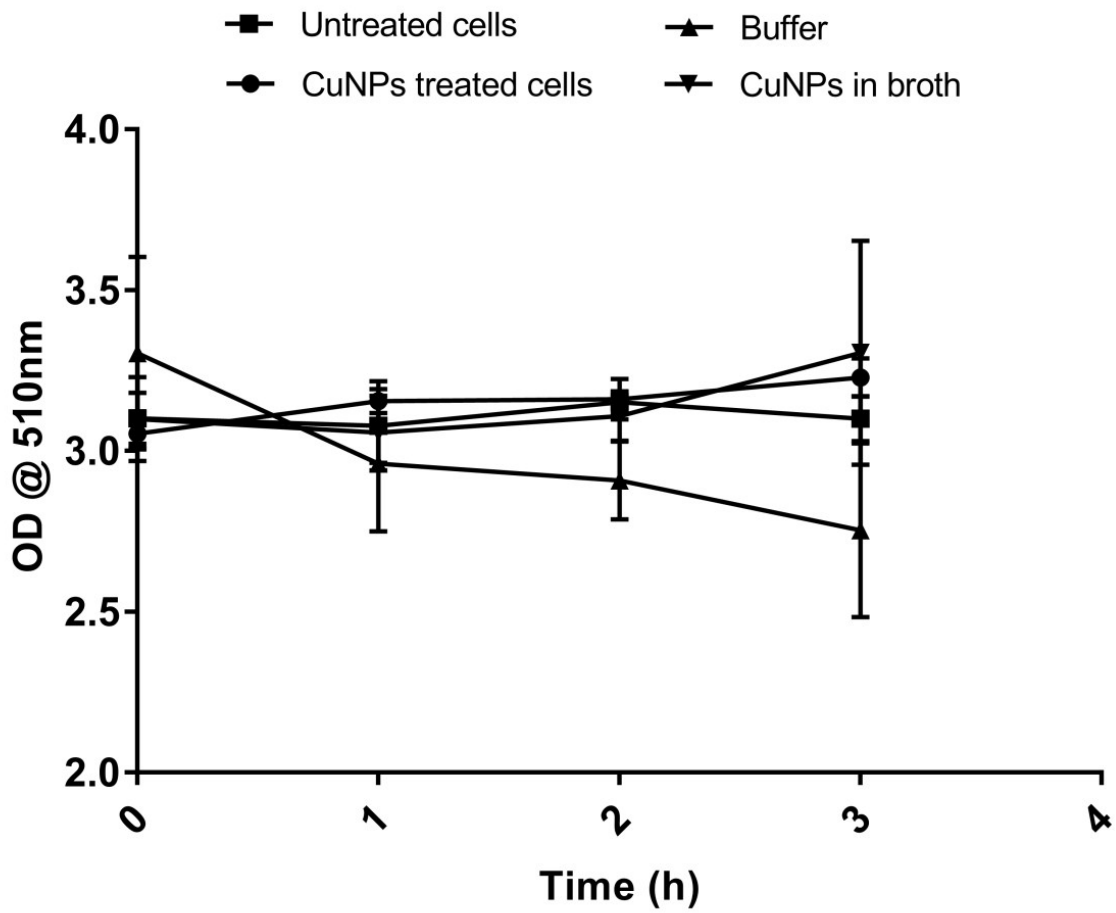


Fig.S4: Alizarin red conjugation test showing that no significant release of Cu (II) ions from NLTA- CuNPs.

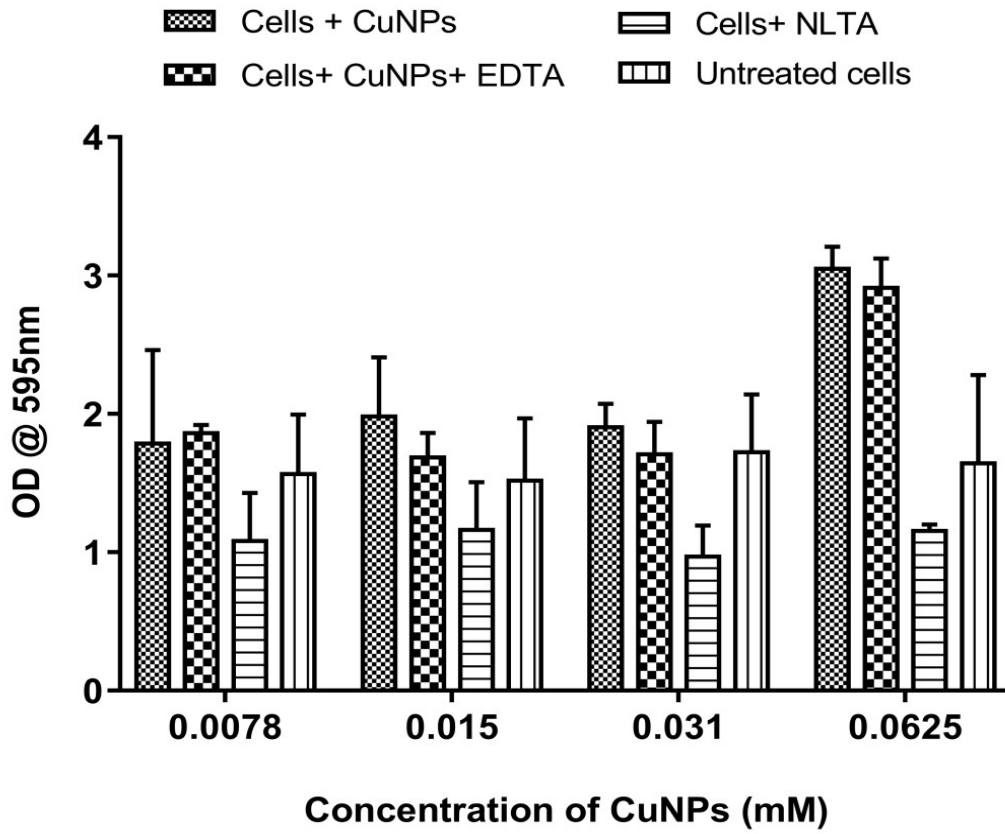


Fig. S5: NLTA-CuNPs induces respiratory burst at higher concentrations