

Figure S1 The multi point BET isotherm plots for MgOW, MgOC and MgOE indicating difference in slope of the isotherm plot

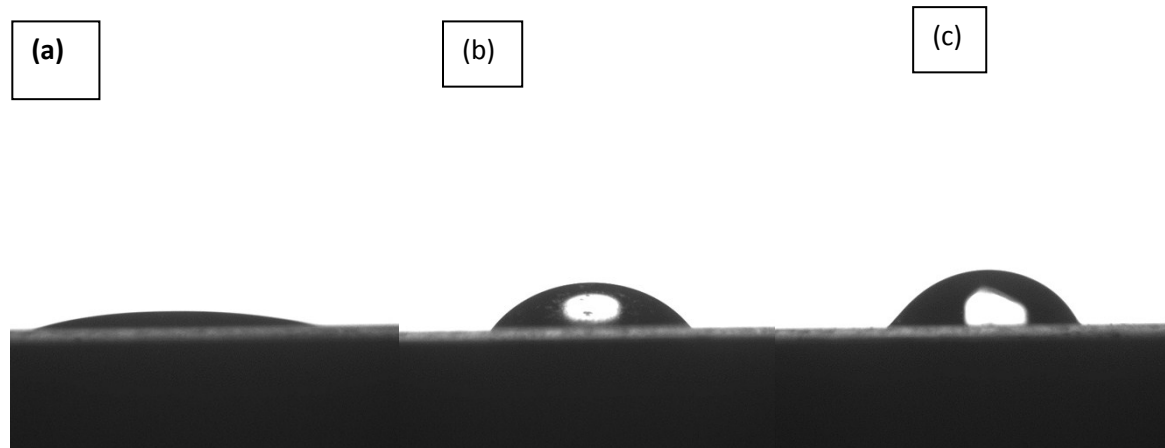


Figure S2 Contact angle of (a) water, (b) aqueous CTAB solution and (c) Ethanol

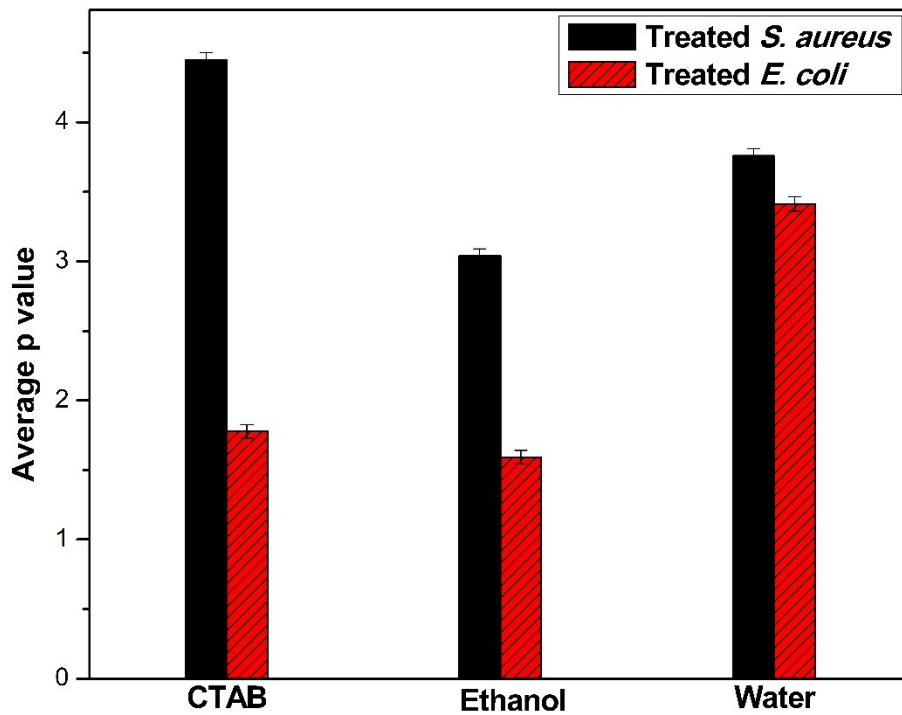


Figure S3 Average p values for all the solvents in *S. aureus* and *E. coli* indicating the lowest value for MgOE for both the cases

CFU Reduction:

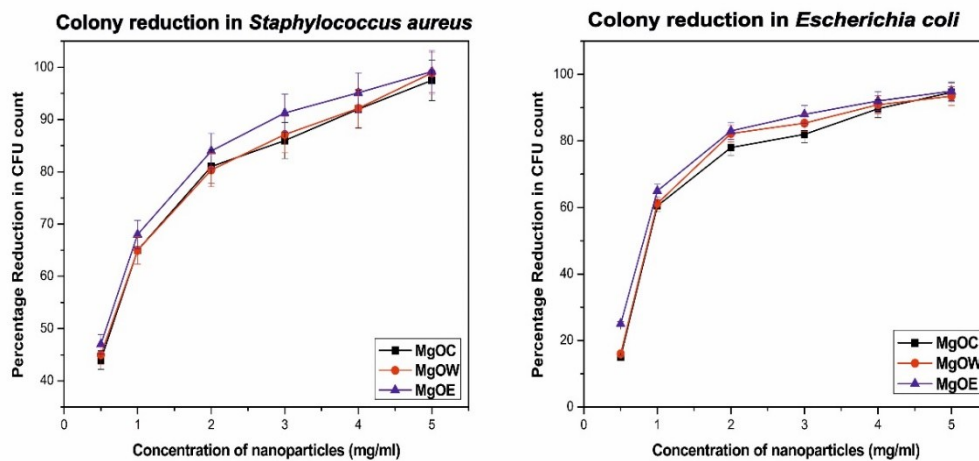


Figure S4 Percentage reduction in colony forming unit (CFU) count with increasing concentration of (a)MgOW (b) MgOC and (c) MgOE nanoparticles

Table S1 Doubling time of hydrogen peroxide generation with time and concentration of nanoparticles

	Type of solution	Doubling time (h)
<i>S. aureus</i>	1 mg/ml MgOE	19
	1 mg/ml MgOW	20.97
	1 mg/ml MgOC	20.15
	5 mg/ml MgOE	21.97
	5 mg/ml MgOW	25.50
	5 mg/ml MgOC	31.13
	<i>E. coli</i>	1 mg/ml MgOE
1 mg/ml MgOW		14.48
1 mg/ml MgOC		14.03
5 mg/ml MgOE		23.17
5 mg/ml MgOW		25.50
5 mg/ml MgOC		28.69