

### Supporting Information

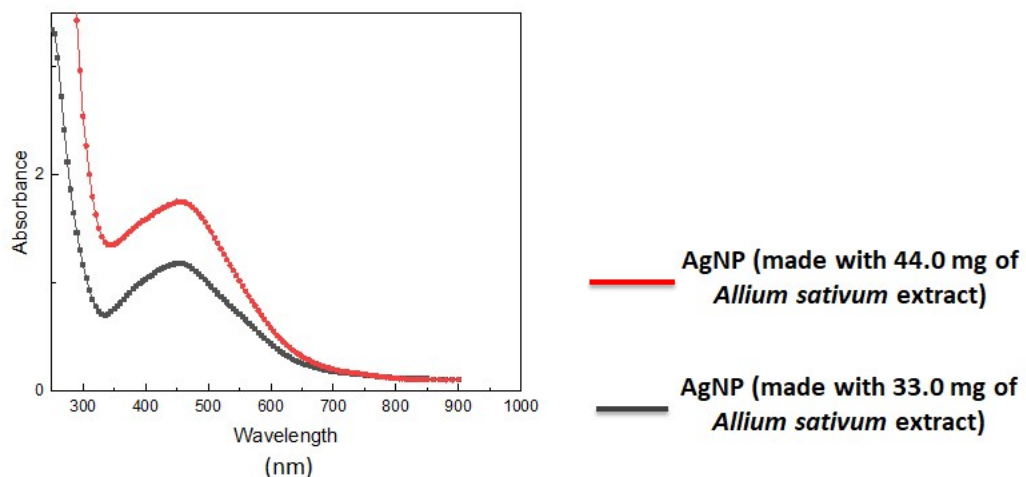


Figure S1. Analysis of the synthesized AgNP by UV/Vis spectrophotometry. The red line shows the absorbance and relative wavelength of AgNP synthesized with 33.0 mg of *Allium sativum* extract. The black line shows the absorbance and relative wavelength of the AgNP synthesized with 44.0 mg of *Allium sativum* extract.

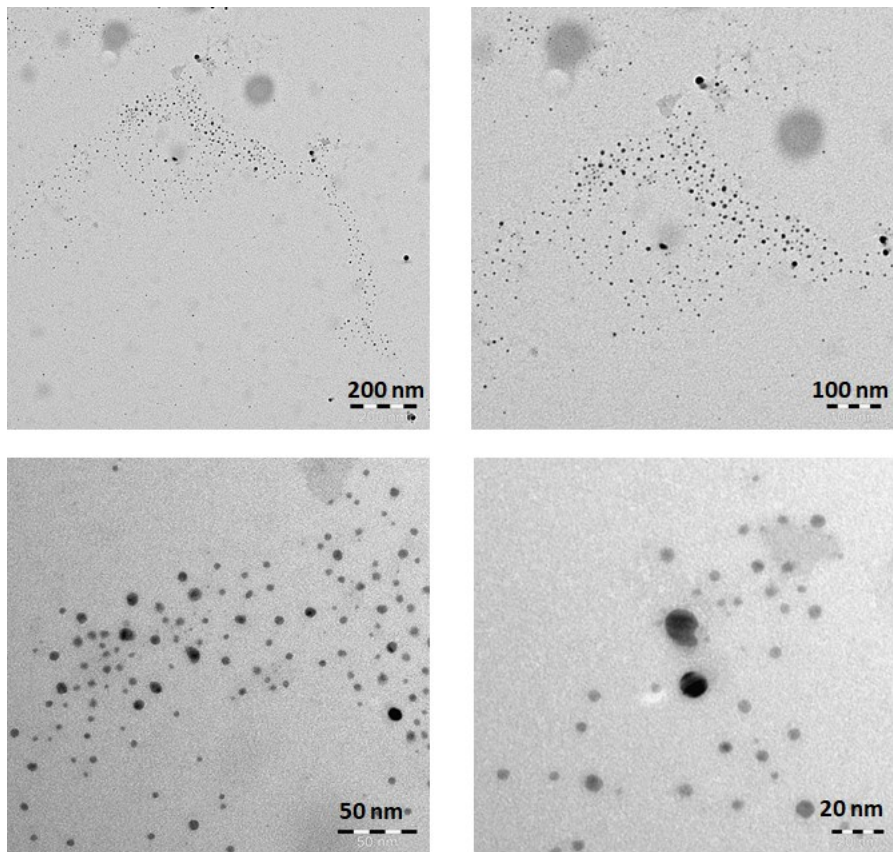


Figure S2. TEM image of the synthesized AgNPs at different magnifications.

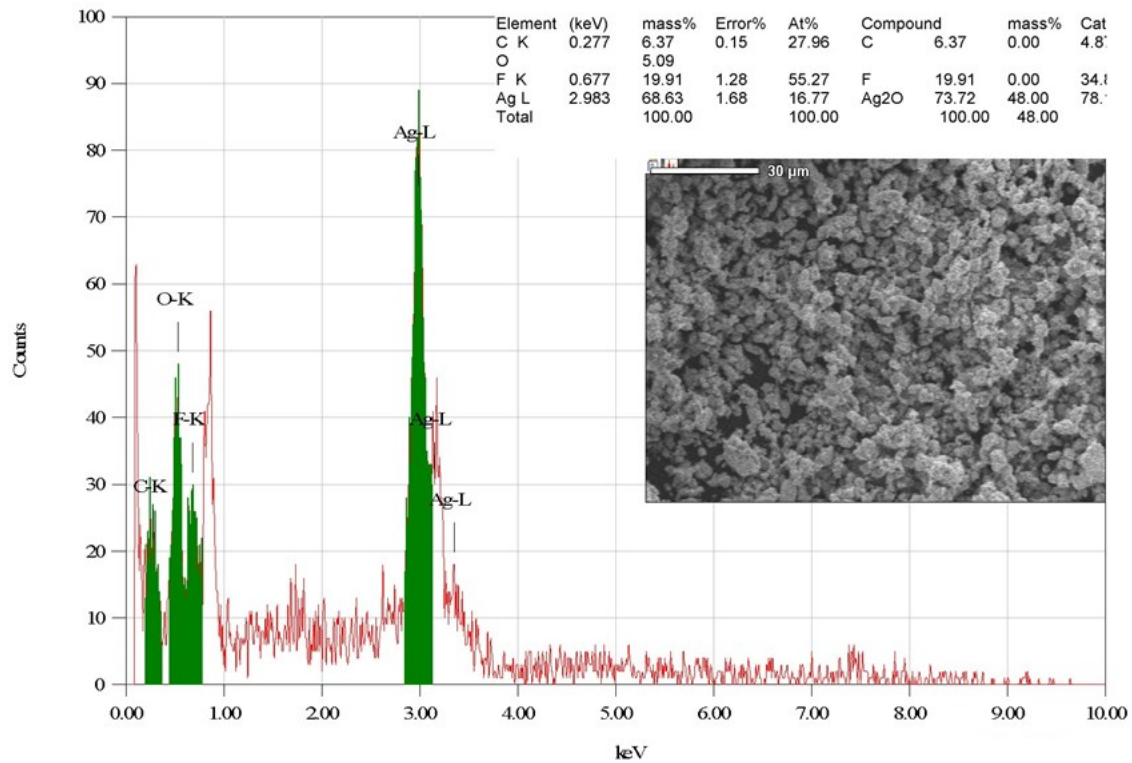


Figure S3. Analysis of the synthesized AgNPs by Energy-dispersive X-ray spectroscopy (EDS). The mass percentage of Ag in the synthesized AgNP is around 70% as shown in the table above.

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**System**

Temperature (°C): 25.0                      Duration Used (s): 60  
Count Rate (kcps): 372.6                    Measurement Position (mm): 4.65  
Cell Description: Disposable sizing cuvette                    Attenuator: 7

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**Results**

	Size (d.nm):	% Intensity:	St Dev (d.n...
<b>Z-Average (d.nm): 167.2</b>	<b>Peak 1:</b> 171.0	100.0	63.02
<b>Pdl: 0.311</b>	<b>Peak 2:</b> 0.000	0.0	0.000
<b>Intercept: 0.942</b>	<b>Peak 3:</b> 0.000	0.0	0.000

**Result quality : Good**

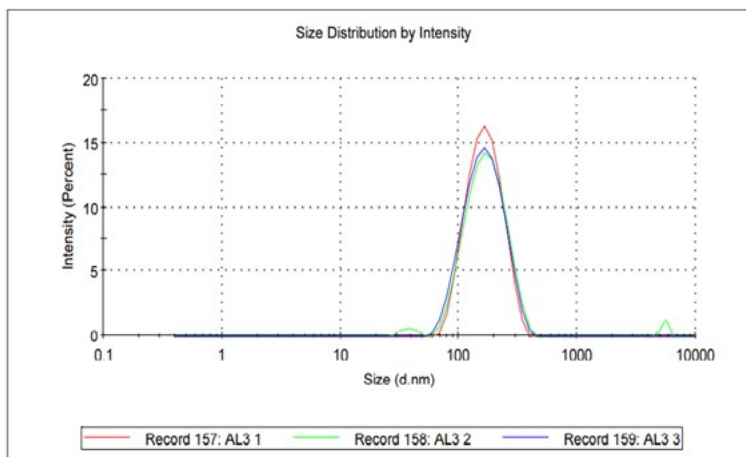


Figure S4. Analysis of the synthesized AgNPs by Dynamic light scattering (DLS). The AgNP size as detected by DLS was 167.2 nm. The experiment was performed in triplicates.

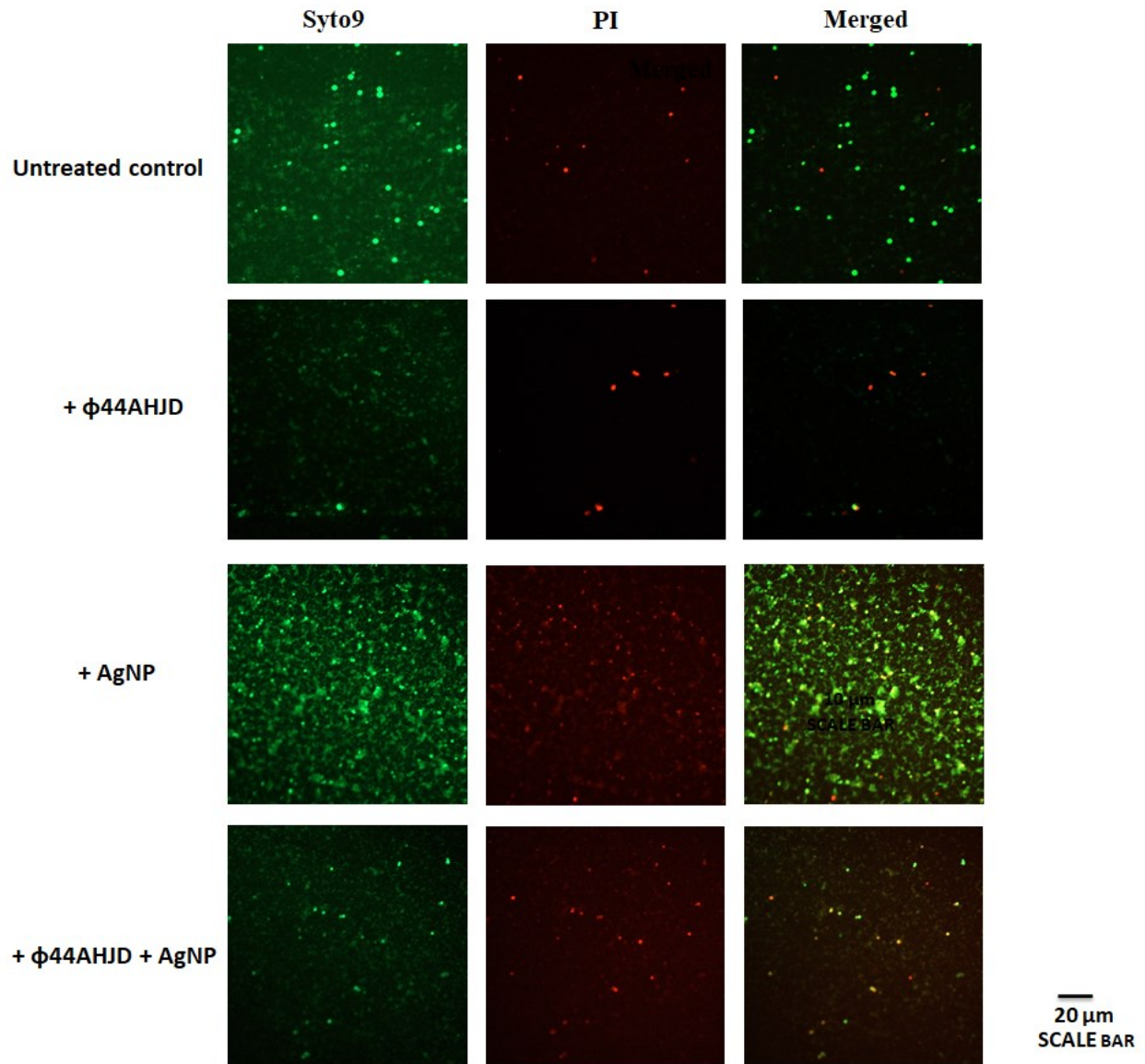


Figure S5. Live/dead staining of the treated *S. aureus* Rumba biofilm. As evident, maximum dead cells were seen where treatment with both the phage and AgNP was done.