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Spectroscopic investigation of antimicrobial nanoparticles JINGYAO DOU, Texas AM university, DMITRI VORONINE, Texas AM universityBaylor University — E. coli is a common bacteria for spectroscopic analysis of antimicrobial agents. We use plasmonic metal nanoparticles for inactivation of bacteria and nanoscale spectroscopic analysis of the effect of the nanoparticles. Scanning probe microscopy such as SEM and AFM can be used for nanoscale imaging of the bacteria-nanoparticle interactions. We investigate the effects of the laser wavelength and temperature on the bacteria.

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