

Electronic Supplementary Information (ESI)

Conjugated polymer nanoparticles with tunable antibacterial photodynamic capability

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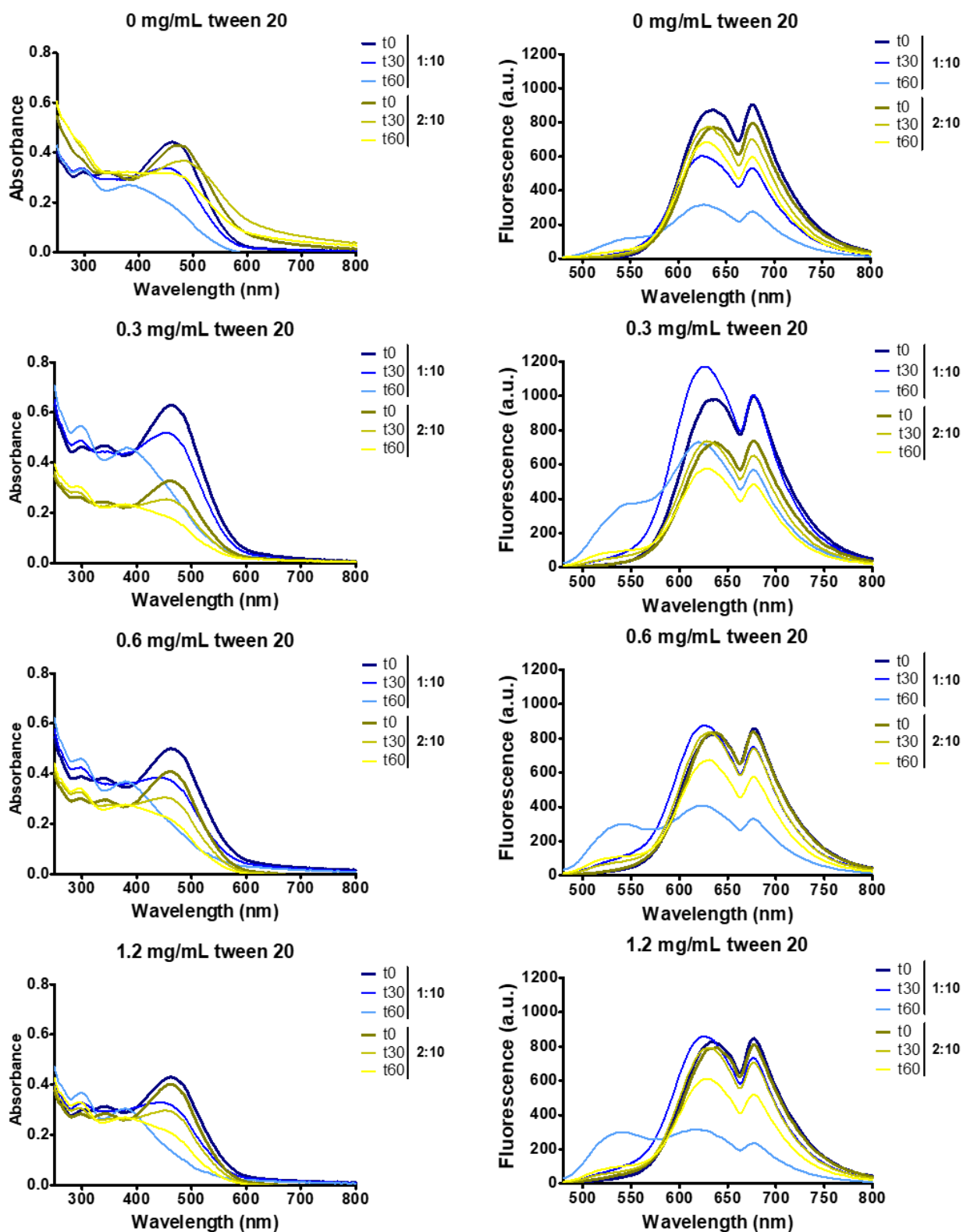


Figure S1. Photostability of CPNs before and after exposure to light (450 nm). Absorption and fluorescence intensity spectra of CPNs at 20 $\mu\text{g}/\text{mL}$ CN-PPV prior to light exposure (t0) and after 30 and 60 minutes light irradiation.

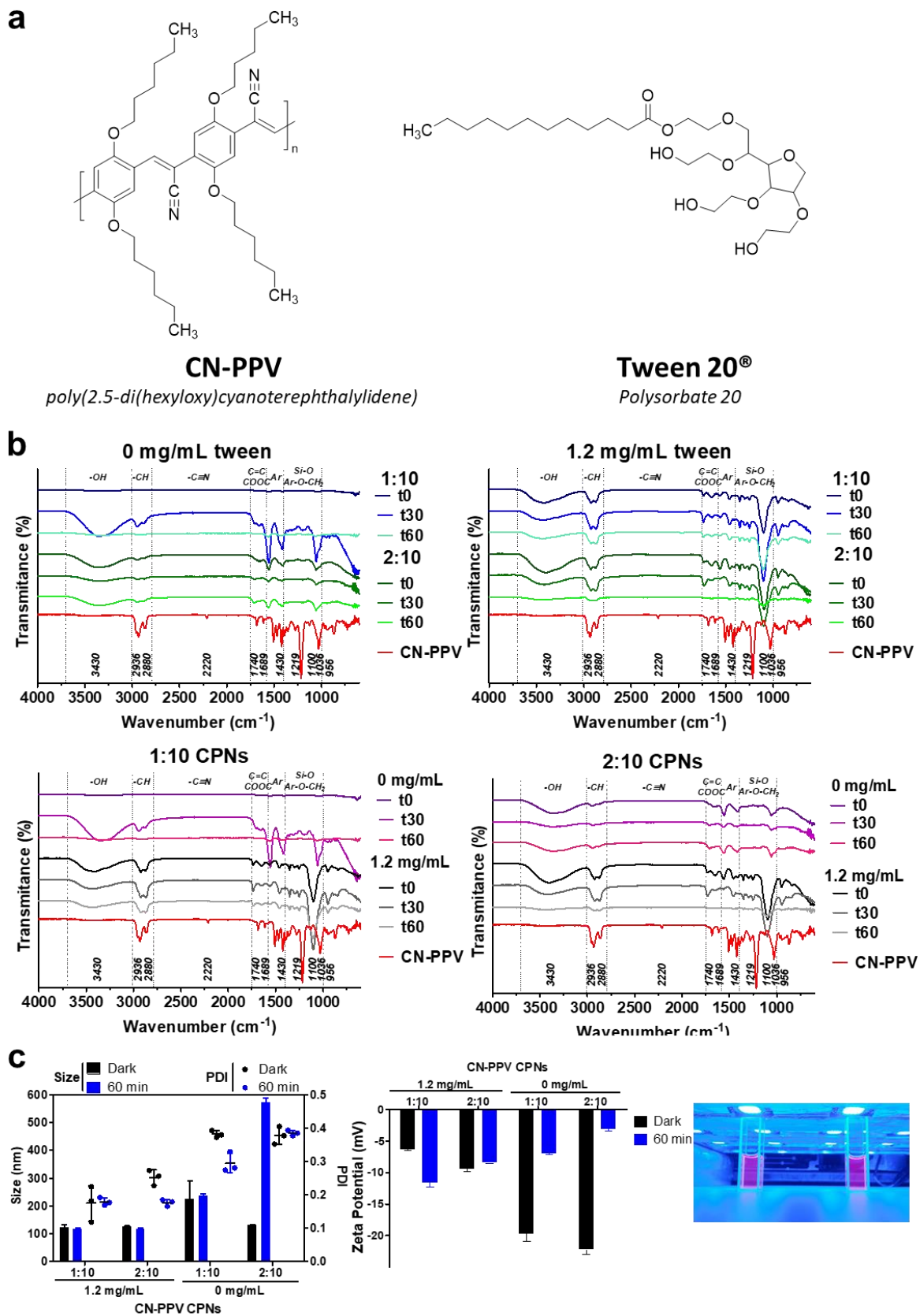


Figure S2. Chemical structures of CN-PPV and tween 20 (a). FTIR spectra of the conjugated polymer powder (CN-PPV) and of CPNs prior to light exposure (t0) and after 30 and 60 minutes light irradiation (b). Hydrodynamic diameters and zeta potential of CPNs kept in the dark and exposed to light for 60 min (c).

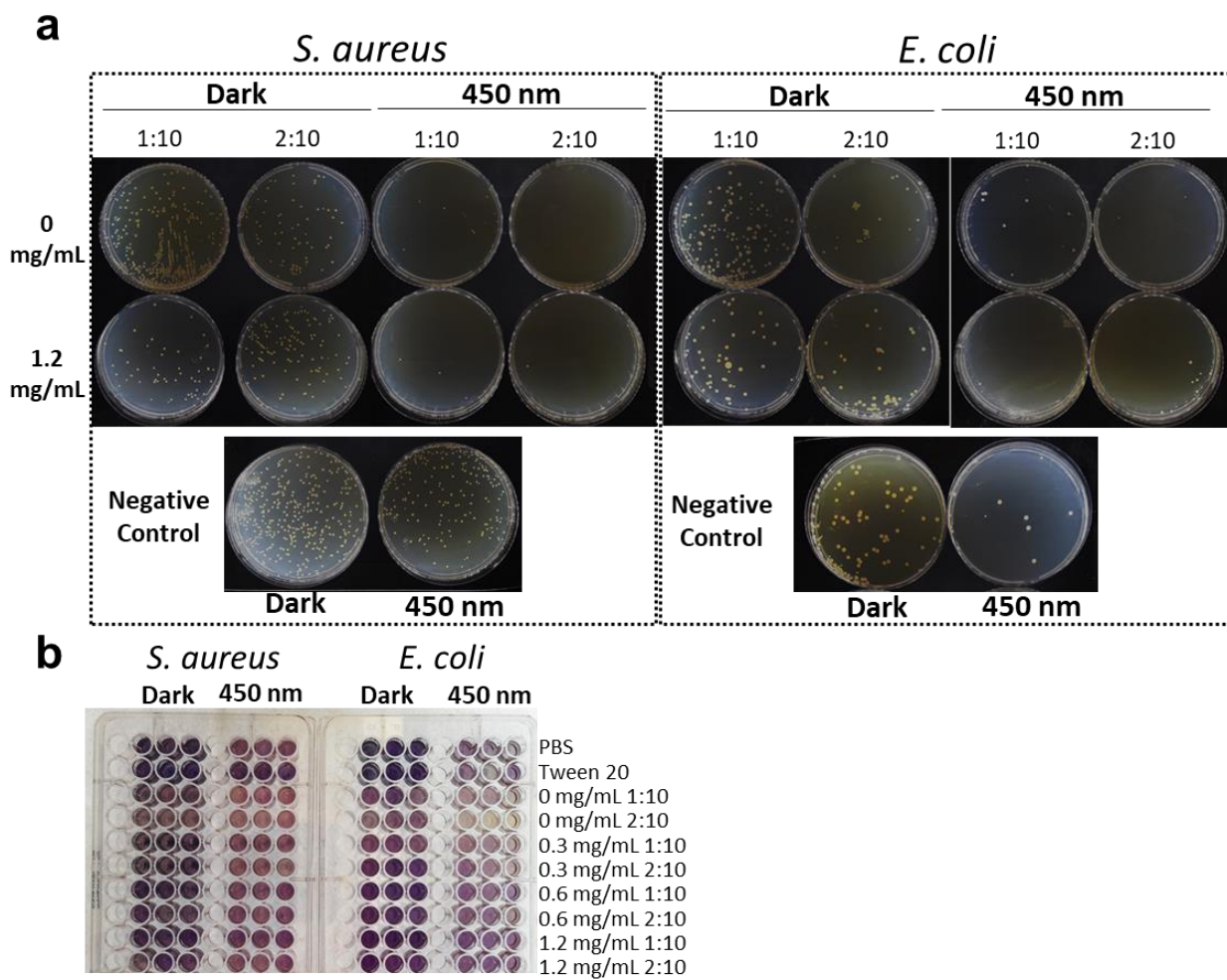


Figure S3. Representative images of bacteria colonies on agar plates showing the light-activated antimicrobial activity of conjugated polymer nanoparticles (a). Tetrazolium-based metabolic activity of *E. coli* and *S. aureus* exposed nanoparticles and controls under irradiation (450 nm, 1h) and non-irradiated (b).