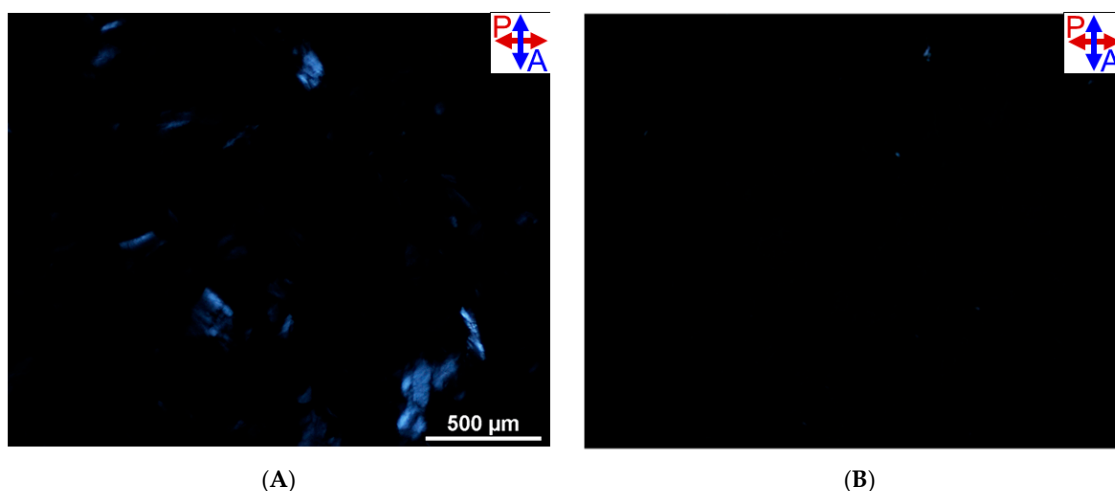
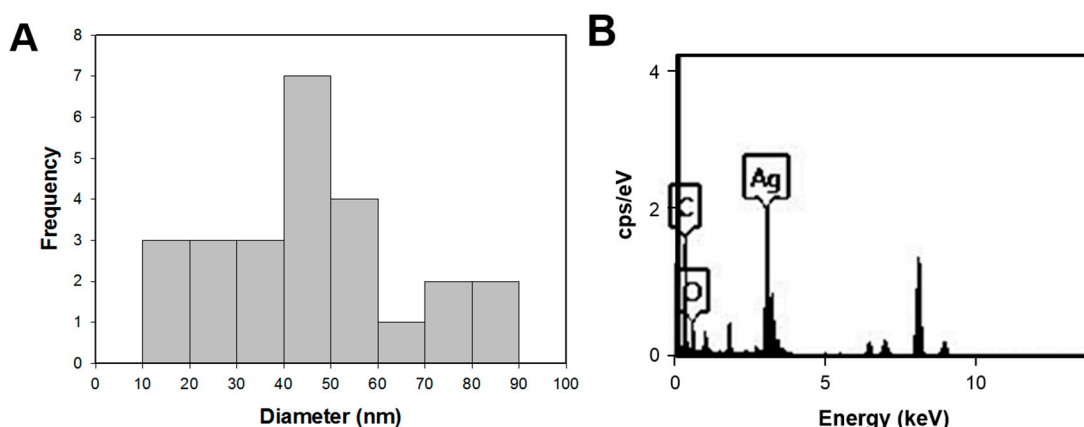


# Supplementary Materials: Mussel-Inspired Anisotropic Nanocellulose and Silver Nanoparticle Composite with Improved Mechanical Properties, Electrical Conductivity and Antibacterial Activity

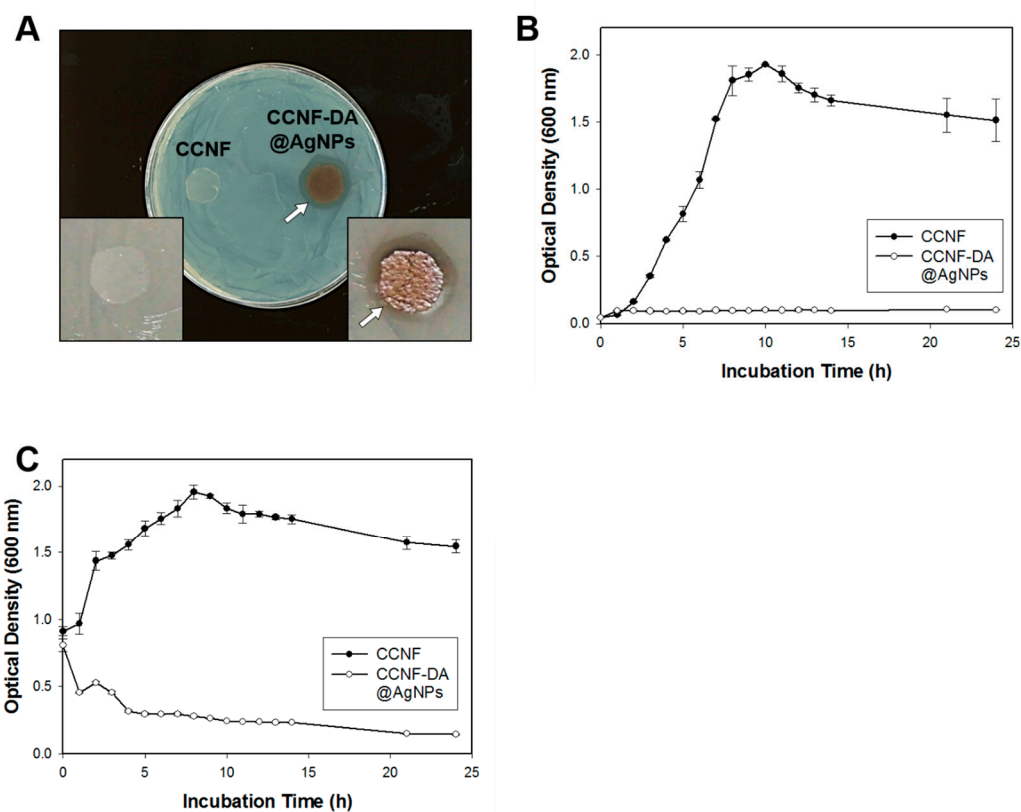
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**Figure S1.** POM images of (A) CCNF and (B) CCNF-DA/AgNPs hydrogels. Both images are scaled to the same magnification.



**Figure S2.** (A) Size distribution of AgNPs on CCNF-DA/AgNPs; (B) EDS analysis of the elemental composition of CCNF-DA/AgNPs.



**Figure S3.** Antibacterial test on CCNF-DA/AgNPs membrane. **(A)** Disk diffusion test; **(B)** bacterial growth profiles; and **(C)** bactericidal profiles of the CCNF-DA/AgNPs membrane against *S. aureus*. The data represent mean  $\pm$  standard deviation. The white arrow indicates the inhibition zone.



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