

# Supplementary Materials: Multifunctional Biological Performance of Electrospun PCL Scaffolds Formulated with Silver Sulfide Nanoparticles

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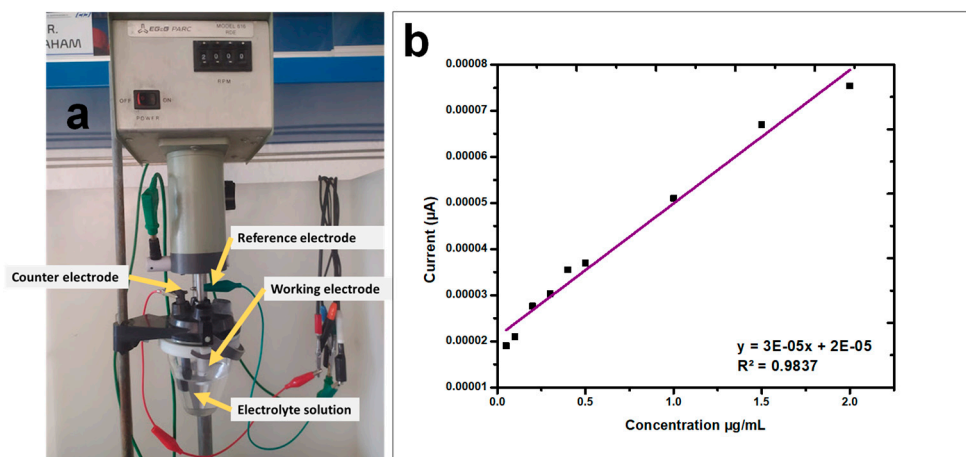
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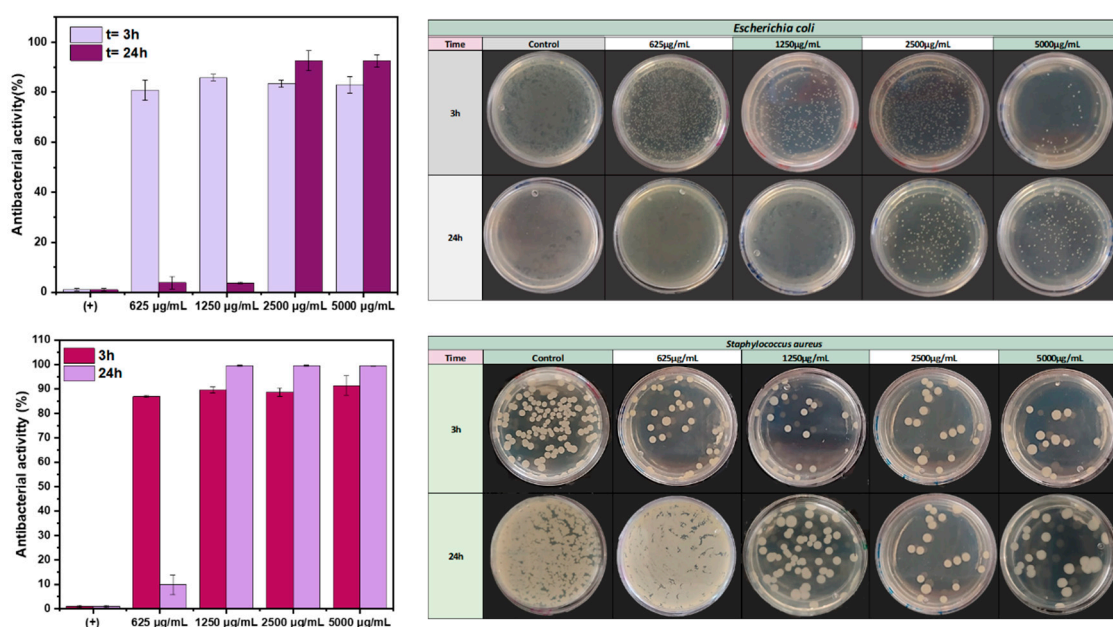
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**Table S1.** Comparative table of electrospinning parameters adjustment to obtain PCL/Hep/Ag<sub>2</sub>S nanostructured scaffolds.

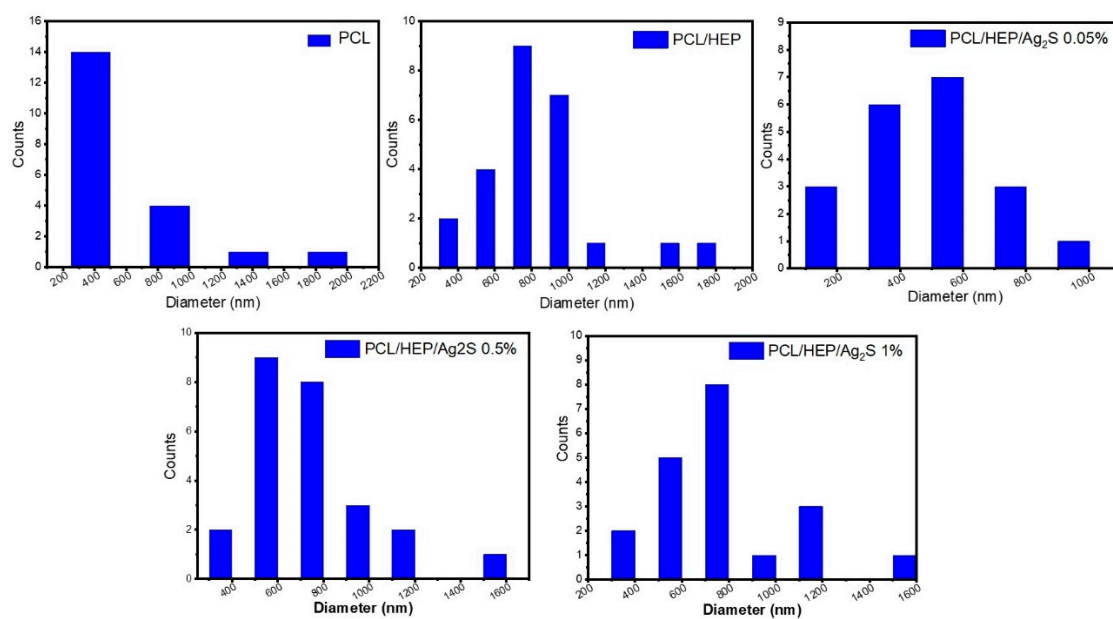
Sample	Voltage (Kv)	Pump Flow (μL/h)	Distance (cm)	Collector Speed (rpm)	Fiber Morphology
PCL/Hep/Ag <sub>2</sub> S NPs	10	6	10	1500	Twisted fibers
		6	15	1500	Irregular fibers
		12	10	1500	Irregular fibers
		12	15	1500	Fibers with beads
	12	6	15	1500	Irregular fibers
		12	15	1500	Twisted irregular fibers
	15	6	10	1500	Twisted fibers with beads
		6	15	1500	Fibers with beads
		12	10	1500	Regular nanofibers with beads
		12	15	1500	Homogeneous nanofibers
	18	12	15	1500	Irregular fibers



**Figure S1.** Ag ion release test by cyclic voltammetry: a) Three-electrode configuration and b) Calibration curve of  $\text{Ag}_2\text{S}$  NPs.

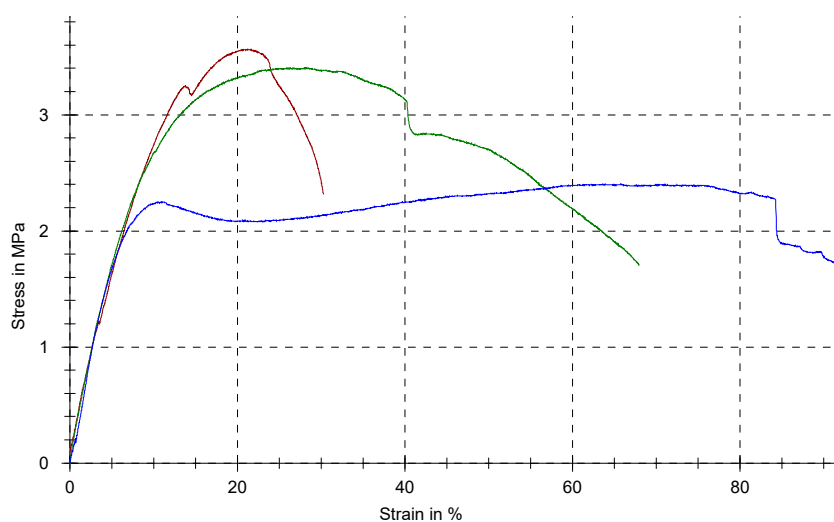


**Figure S2.** Kinetics of antibacterial activity (AA) of  $\text{Ag}_2\text{S}$  NPs after 3 and 24 h of contact against Gram (-) *E. coli* and *S. aureus*.

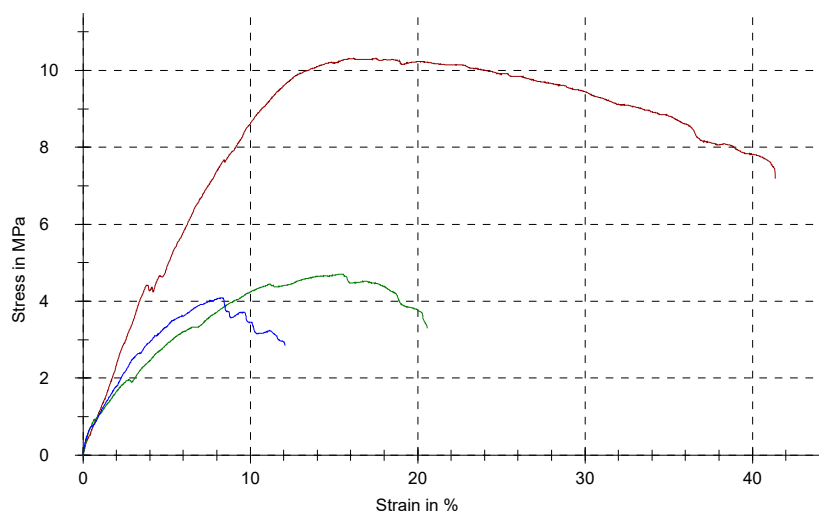


**Figure S3.** Fiber diameter distribution obtained from the electrospun of PCL, PCL/Hep, and the formulation of different amounts of Ag<sub>2</sub>S NPs (PCL/Hep/Ag<sub>2</sub>S).

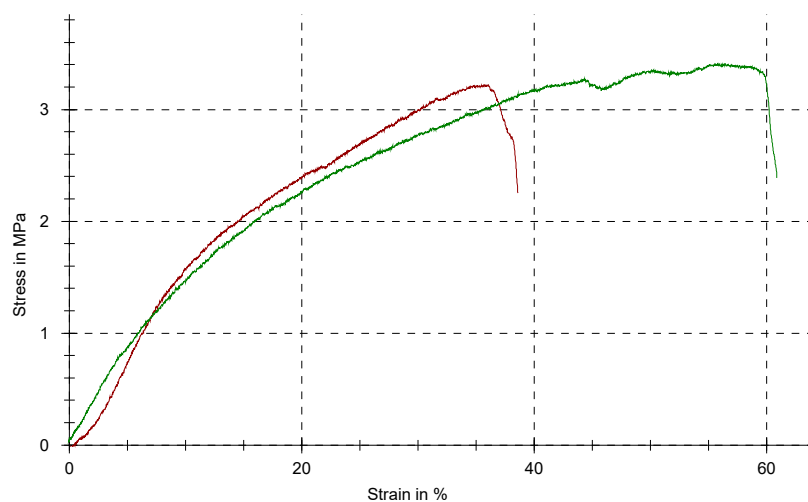
(a)



(b)



(c)



**Figure S4.** Stress-strain curves of (a) PCL, (b) PCL/HEP, and (c) PCL/HEP/Ag<sub>2</sub>S 0.5 %.