

A facile and scalable strategy for fabricating bio-based photodynamic antimicrobial nonwoven eco-textiles

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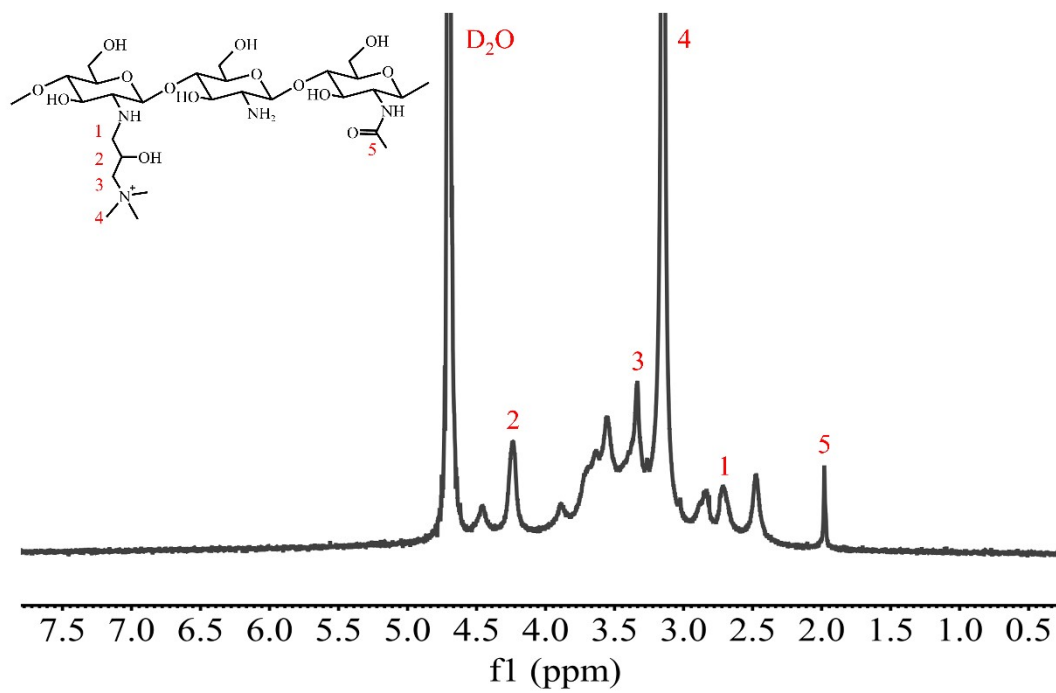


Fig. S1. ¹H NMR spectra of QCS.

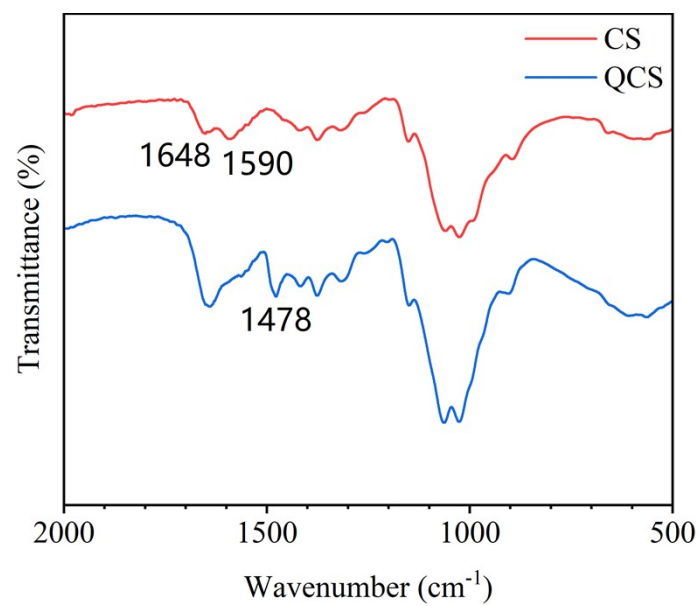


Fig. S2. FTIR spectra of CS and QCS.

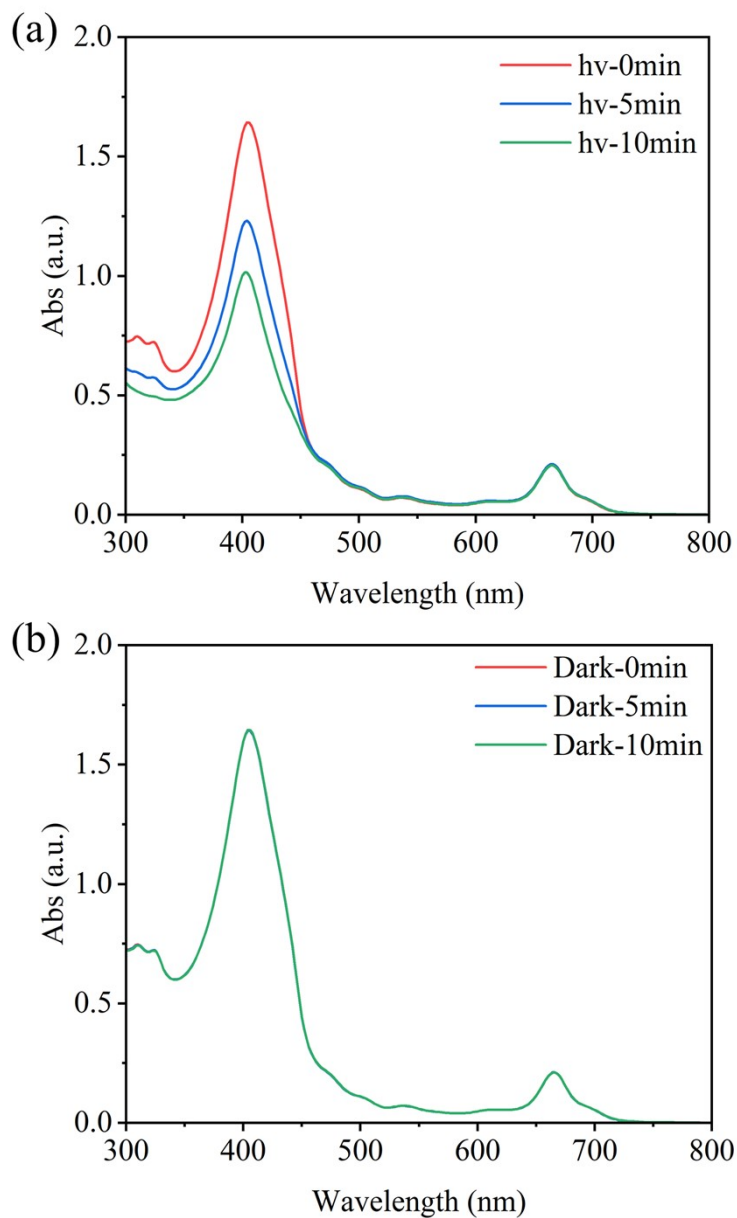


Fig. S3. (a) Singlet oxygen yield of SE within 10 min under Xenon light. (b) Singlet oxygen yield of SE within 10 min under dark.

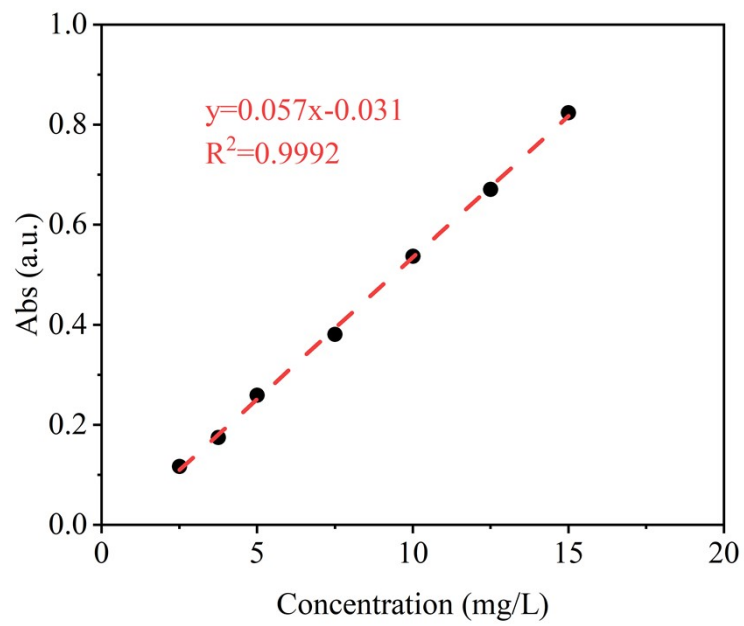


Fig. S4. The standard curve of SE

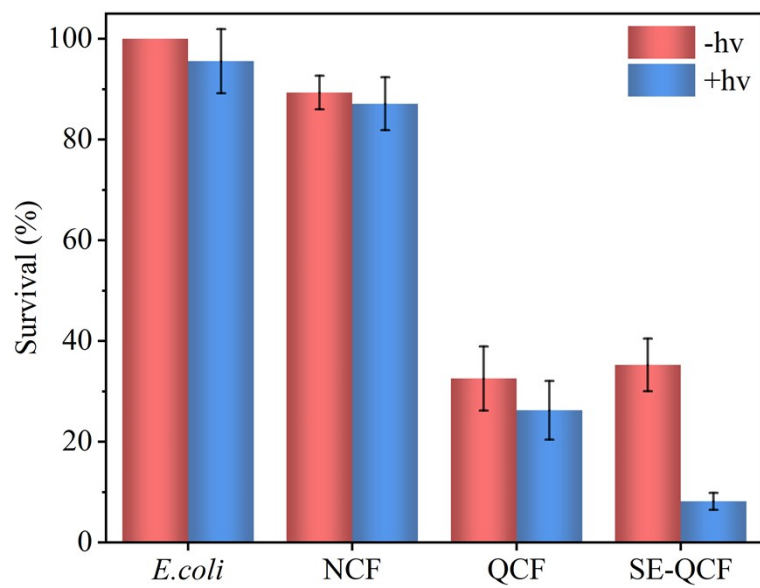


Fig. S5. Inhibition efficiency of NCF, QCF and SE-QCF against *E. coli* within 1h.

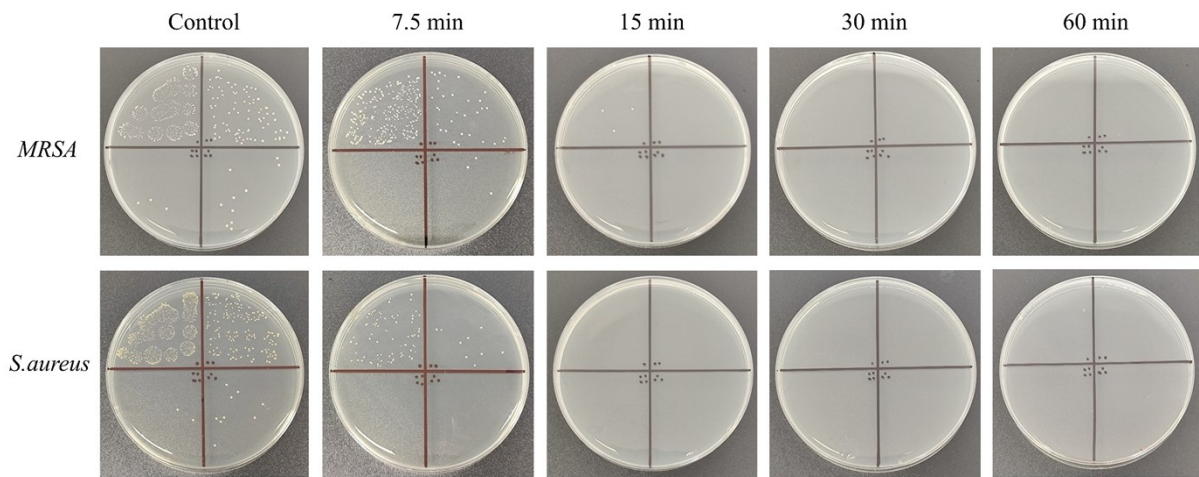


Fig. S6. Images of antimicrobial plates under sunlight intensity.

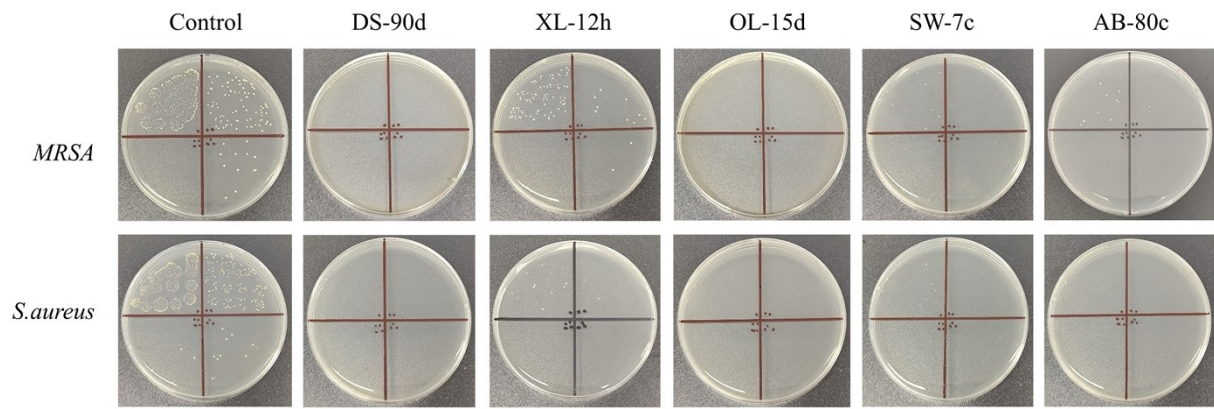


Fig. S7. Images of antimicrobial plates under sunlight intensity after simulating various failures.

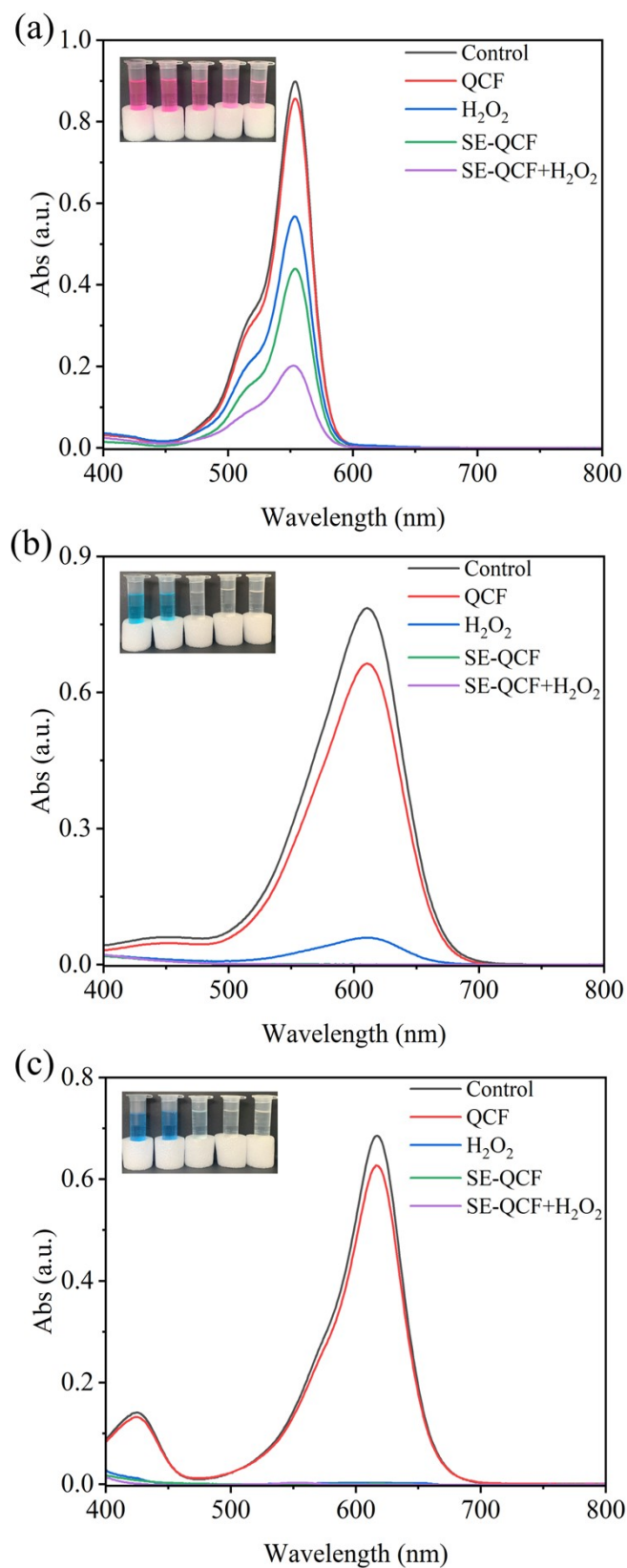


Fig. S8. UV-vis absorption curves and images for photodegradation of (a) rhodamine B, (b) malachite green and (c) indigo carmine.

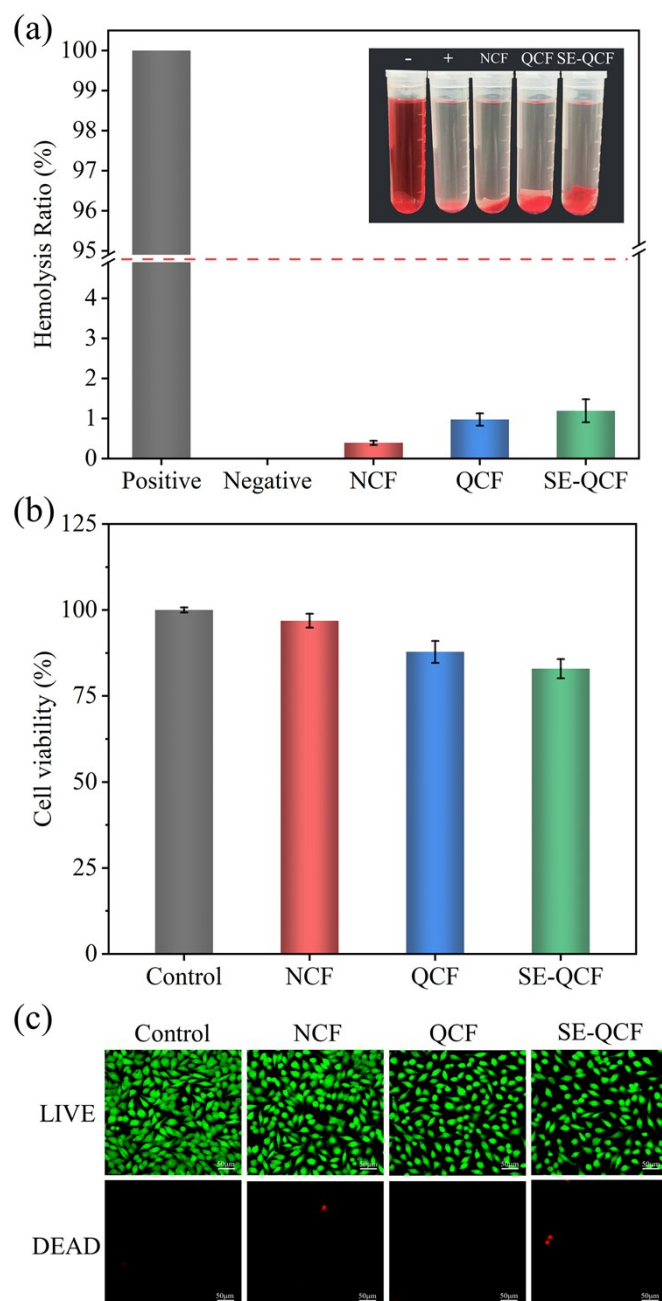
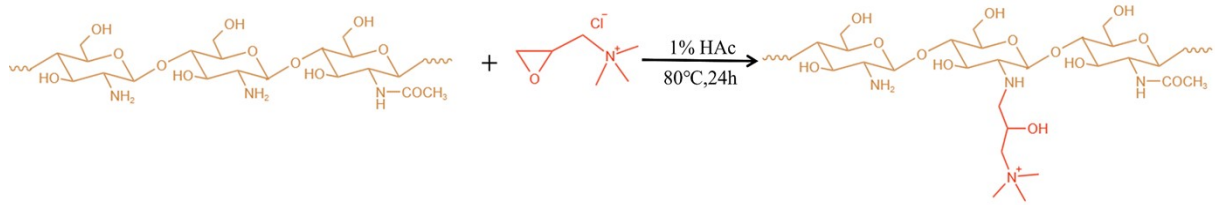
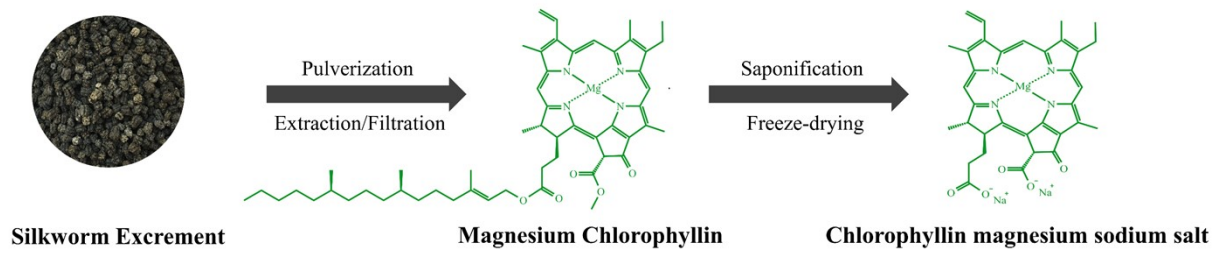


Fig. S9. (a) Hemolytic property, (b) Cell viability and (c) CLSM images of LIVE/DEAD cell staining of NCF, QCF and SE-QCF. Green dots and red dots represented live cells and dead cells, respectively.



Scheme.S1 The synthesis reaction of QCS



Scheme.S2 The extraction process of SE