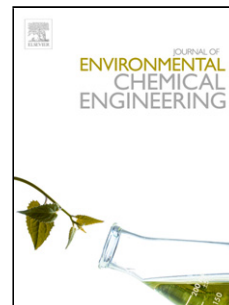


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A novel hybrid β -chitin/Calcium phosphate functionalized with copper nanoparticles for antibacterial applications

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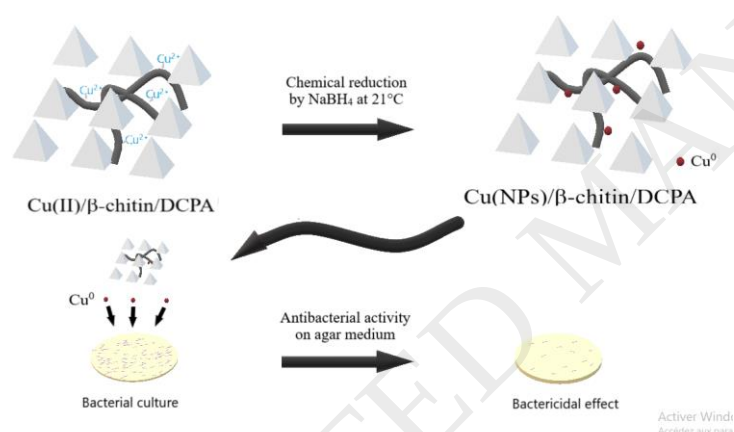
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Graphical Abstract



Highlights

- Cu^{II}- β -chitin/calcium phosphate hybrid was prepared using ultrasound assisted method
- Cu(NPs) loaded onto β -chitin/calcium phosphate was obtained by chemical reduction
- β -chitin acts as an anchoring agent for Cu(NPs) without the use surfactants
- Copper materials show a high sensitivity against Gram (positive and negative) strains
- Cu(NPs) exhibits the best antibacterial activity toward gram-positive bacteria

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