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Superhydrophilic anti-fouling electrospun cellulose acetate membranes coated with chitin nanocrystals for water filtration

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ABSTRACT:

Electrospun cellulose acetate (CA) random mats were prepared and surface coated with chitin nanocrystals (ChNC) to obtain water filtration membranes with tailored surface characteristics. Chitin nanocrystals self-assembled on the surface of CA fibers into homogenous nanostructured networks during drying that stabilized via hydrogen bonding and formed webbed film-structures

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