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## ACCEPTED MANUSCRIPT

# DESIGN OF REUSABLE NOVEL MEMBRANES BASED ON BACTERIAL CELLULOSE AND CHITOSAN FOR THE FILTRATION OF COPPER IN WASTEWATERS

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#### Graphical abstract



### Highlights

- Development of *in situ* and *ex situ* BC/Ch membranes for Cu removal in wastewaters
- Interactions, morphology and mechanical properties depend on the processing route
- Highest copper removal capacity for *in situ* biosynthesized membrane
- Easily cleanable and reusable membranes

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