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Title: A facile and green emulsion casting method to prepare chitin nanocrystal reinforced citrate-based bioelastomer

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Highlights

- A new bioelastomer was synthesized by one-pot melt polycondensation
- Chitin nanocrystal as emulsifier to stabilize pre-polymer and form Pickering emulsion
- An eco-friendly emulsion casting process was used to prepare chitin nanocrystal reinforced nanocomposite elastomers
- Filler-well-dispersed nanocomposite elastomers exhibited ultra-strong mechanical properties

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