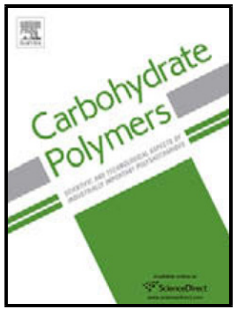

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Fabrication and characterization of hollow starch nanoparticles by gelation process for drug delivery application

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HighlightsWe prepared pH-responsive hollow starch nanoparticles (HSNPs) by starch gelation.

- HSNPs have a size range from 30 to 300 nm, with shell thickness of 5-10 nm.
- High loading efficiency (97.56%) and loading content (37.12%) for DOX were found.
- DOX-loaded HSNPs presented clear cytotoxicity for liver hepatocellular cells.
- No cytotoxicity for normal liver cells was found in HSNPs.

Abstract

Hollow nanoparticles (HNPs) have been widely regarded as controlled drug carriers owing to their advantages, such as high drug-loading efficiency and superior control over