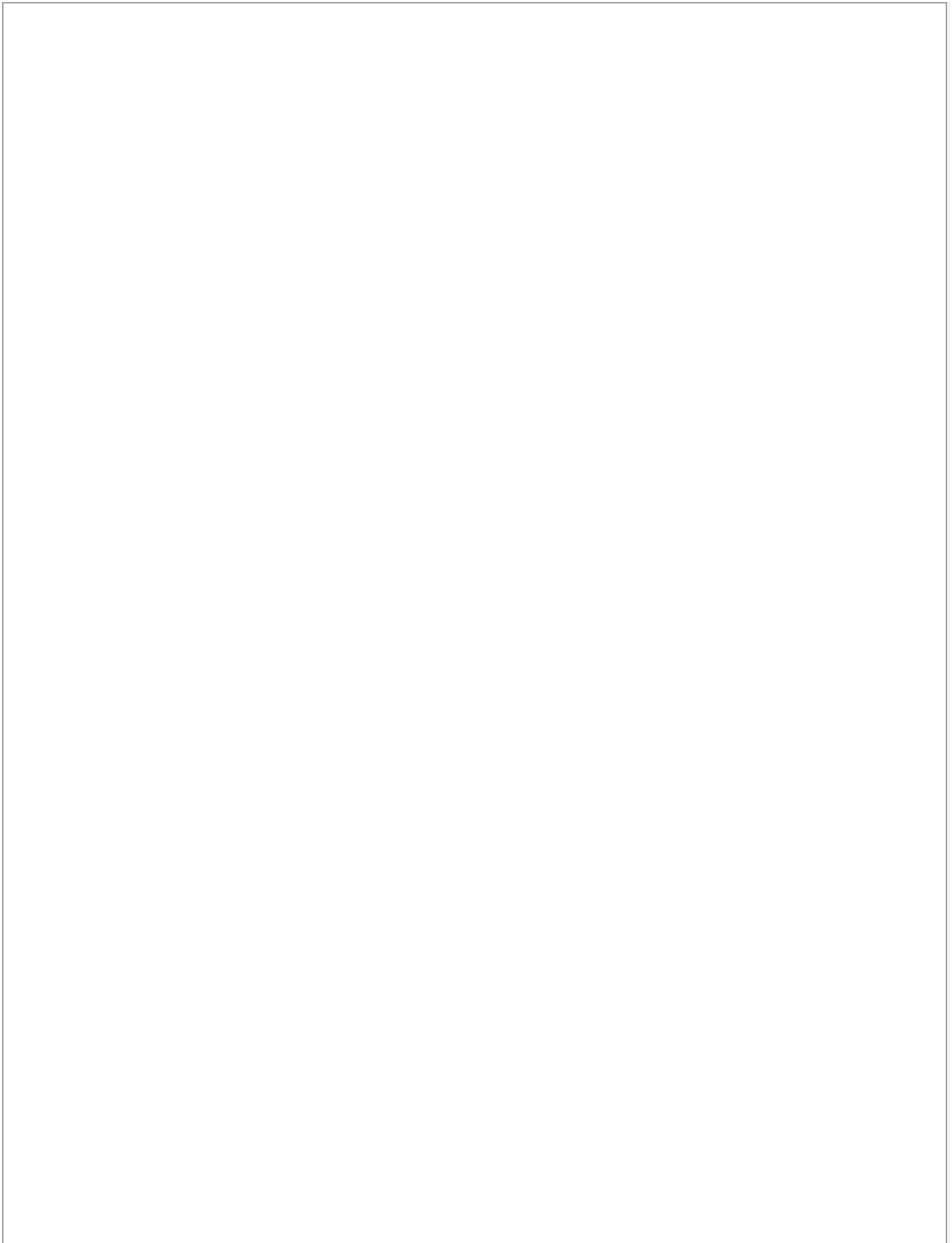


## Documents



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### **Chitosan-modified nanocarriers as carriers for anticancer drug delivery: Promises and hurdles**

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#### **Abstract**

With the advent of drug delivery, various polymeric materials are being explored to fabricate numerous nanocarriers. Each polymer is associated with a few characteristics attributes which further facilitate its usage in drug delivery. One such polymer is chitosan (CS), which is extensively employed to deliver a variety of drugs to various targets, especially to cancer cells. The desired properties like biological origin, bio-adhesive, biocompatibility, the scope of chemical modification, biodegradability and controlled drug release make it a highly rough after polymer in pharmaceutical nanotechnology. The present review attempts to compile various chemical modifications on CS and showcase the outcomes of the derived nanocarriers, especially in cancer chemotherapy and drug delivery. © 2022 Elsevier B.V.

#### **Author Keywords**

Biocompatibility; Biodegradability; Chemotherapy; Chitin; Derivatives; Micelles; Nanoparticles; Nanotechnology

#### **Index Keywords**

antineoplastic agent, chitosan, drug carrier, nanoparticle, polymer; chemistry, drug delivery system; Antineoplastic Agents, Chitosan, Drug Carriers, Drug Delivery Systems, Nanoparticles, Polymers

#### **Chemicals/CAS**

chitosan, 9012-76-4; Antineoplastic Agents; Chitosan; Drug Carriers; Polymers

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