

## عنوان مقاله:

A Critical Comparison Study on the pH-Sensitive Nanocomposites Based on Graphene-Grafted Chitosan for Cancer Theragnosis

## محل انتشار:

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## خلاصه مقاله:

Abstract Drug delivery is one of the major issues in the world of science, which receives a large part of the research in various fields. The ultimate goal of drug delivery is to help the patient with developing advanced drug delivery systems. These systems revolutionize the treatment of many diseases including cancer. Effective drug carriers can significantly reduce the undesirable side effects of anticancer drugs through the drug controlled release and using the selective drug to cancerous tissue. The natural biocompatible and biodegradable polymer of chitosan is widely investigated in drug delivery systems, especially as the carrier for anticancer drugs. An important aspect for the application of chitosan in drug delivery for cancer treatment is its pH sensitivity. Graphene attracted much attention in various fields as a shining star in the science of materials. In recent years, the use of graphene in the diagnosis and treatment of cancer is also investigated. Therefore, chitosan-graphene nanocomposite can be introduced as a pH-sensitive carrier for cancer theragnosis. In the current study, the application of chitosan and graphene in the treatment .of cancer addressed in previous years was discussed

## کلمات کلیدی:

Neoplasms, Chitosan, Graphene, Theranostic Nanomedicine, Nanocomposites

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