

عنوان مقاله:

Application of nano compounds for the prevention, diagnosis, and treatment of SARS-coronavirus: A review

محل انتشار:

فصلنامه کامپوزیت ها و ترکیبات, دوره 3, شماره 9 (سال: 1400)

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خلاصه مقاله:

Coronavirus disease, also called COVID-۱۹, a universal health concern, has affected more than ۲۰۰ countries after its declaration as a pandemic on ۱۱ March ۲۰۲۰ by the World Health Organization, WHO. COVID-۱۹ results due to SARS-CoV-۲ entrance into the epithelial cells of the human's lung. Recently, nanotechnology has turned to be a great promising method used in the medical field regarding viruses. By mitigating infection, nanotechnology plays an important part in the diagnostics, prevention, and therapeutic approaches for controlling COVID-۱۹. The development of nanomaterials for viral disease is based on preventive measures and disinfectants, diagnostic devices, and therapeutic drugs or vaccines to transfer antiviral drugs into the human body. Being at the same scale as viruses, nanoparticles can replicate the functional and structural properties of viruses, and nanomaterials can be the best substitute for developing vaccines. A broad range of nanostructures, including gold, silver, zinc, graphene, carbon, liposomes, and polymeric compounds, have antiviral activity and can be employed in vaccine development or inactivation of the virus.

کلمات کلیدی:

SARS-coronavirus, Nanocompounds, COVID-۱۹, Nanotechnology

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