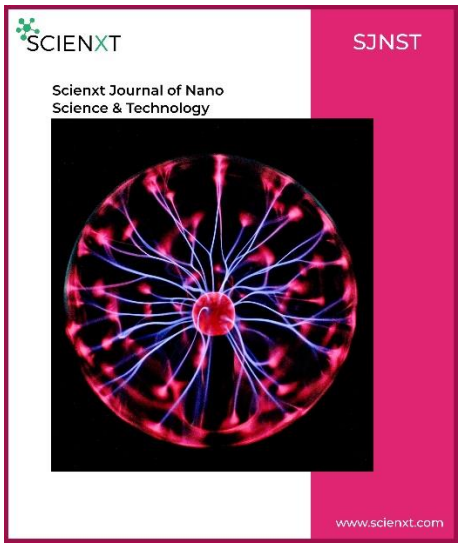

Adoption of Nanotechnology in Medicine

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Abstract:

The term "nanotechnology" refers to the research of objects with dimensions between 0.1 and 100 nm. The study of nanomedicine is a cutting-edge area of contemporary medicine. A brief overview of the numerous nanosystems used in the pharmaceutical industry is provided. On the basis of their sizes, nanomaterials are categorized into four distinct groups. Nanotechnology's potential uses in the realms of medicine, electronics, energy, and the environment are explored. In this research, we will discuss the uses of nanoparticles in the treatment of medicine such as cancer, AIDS, and other diseases. Examples of how carbon nanotubes, dendrimers, nanocrystals, nanowires, nanoshells, and other nanosystems can be used in cancer treatment are discussed. The development of nanotechnology has assisted inside the treatment of neurodegenerative disorders including Parkinson's and Alzheimer's. This research discusses the use of nanotechnology in the treatment of medicine, as well as its clinical applications in operative dentistry, ophthalmology, surgery, imaging, tissue regeneration, antibiotic resistance, and immunological response. Early illness detection is a major benefit of Nano pharmaceuticals.

Keywords:

Drug delivery, Nanodevices, Nanomaterial, Nanomedicine, Nano pharmaceutics.