

عنوان مقاله:

Review of Cobalt Oxide Nanoparticles: Green Synthesis, Biomedical Applications, and Toxicity Studies

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خلاصه مقاله:

In the last few decades, nanoparticles have been analyzed and employed in various industrial applications. Because of numerous features such as antifungal, photochemical, high catalytic, and antibacterial activities, cobalt oxide nanoparticles have attracted a lot of attention because of high incidence of dangerous compounds and the harsh environments utilized in chemical and physical procedures of synthesis of different nanoparticles. Green Nanoparticles manufacturing approaches have been developed by employing plants, fungus, bacteria, and algae. There is a lot of research exploring numerous green production techniques in regulation to present confirmation of cobalt oxide nanoparticles of applications, biological applications, and non-hazardous effects. As an outcome, we have to gather pertinent review articles from inferior sources. Compared with chemical and physical preparation methods, the green synthesis route appears to be safer and extra environmentally forthcoming for the green preparation of the nanoparticles. However, its biomedical applications in this industry are daily in various procedures such as bio-imaging, biosensors, medication administration, and gene delivery. Moreover, cobalt oxide nanoparticles can operate as smart weapons against many drug-resistant microbes and are a talented antibiotic substitution due to their toxicity facial appearance.

کلمات کلیدی:

Environmentally benign, bio-imaging, Biosensors, Gene delivery, Drug-resistant

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