

Nanotechnology in Drug Delivery Systems

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Abstract. This article discusses the role of nanotechnology in revolutionizing drug delivery systems. By enabling targeted delivery and controlled release, nanotechnology enhances the efficacy and safety of therapeutic agents. The authors review recent developments and future prospects of nanotechnology-based drug delivery.

Keywords: Nanotechnology, Drug Delivery, Therapeutics, Targeted Delivery, Controlled Release

Introduction

The application of nanotechnology in drug delivery systems has opened new avenues for the development of more effective and safer therapeutics. By facilitating targeted delivery and controlled release, nanotechnology can significantly improve the pharmacokinetics and pharmacodynamics of drugs. This article reviews the current state of nanotechnology-based drug delivery systems, highlighting recent innovations and their impact on clinical practice. The authors explore the potential of nanotechnology to overcome existing limitations in drug delivery, offering insights into future research directions.

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