

Χαρακτηριστικά:

- Presents an extensive examination of various advanced drug formulations, including nanomedicine, supramolecular systems, and metal-organic frameworks, highlighting their roles in targeted cancer therapy
- Emphasizes the significance of the tumor microenvironment and heterogeneity in influencing drug resistance, providing insights into how these factors affect therapeutic efficacy and treatment outcomes
- Analyzes the limitations of current drug delivery systems, discusses regulatory considerations, and explores future perspectives in anticancer drug delivery

Περιεχόμενα:

I. UNDERSTANDING THE CANCER

1. Introduction to cancer
2. Current practices in cancer chemotherapy
3. Emerging trend in anticancer drug delivery
4. Cancer therapy depending on tumor stroma
5. Cancer therapy depending on cancer cell respiration: pH and hypoxia
6. Cancer therapy depending on tumor vasculature and EPR effects.
7. Cancer therapy based on extracellular matrix
8. Heterogeneity of cancer and drug resistance

II. STRATEGIES AND TECHNOLOGIES FOR CANCER THERAPY

9. Materials and strategies for advanced anticancer drug delivery
10. Drug Conjugates for anticancer drug delivery
11. Self-assembled supramolecular systems for anticancer drug delivery
12. Advances in metal-organic frameworks for anticancer drug delivery
13. Tumor microenvironment targeted drug delivery systems
14. Advances in dendrimers for anticancer drug delivery
15. Advances in metallic nanoparticles for anticancer drug delivery
16. Advances in polymeric nanoparticles for anticancer drug delivery
17. Advances in lipid-based nanoparticles for anticancer drug delivery
18. Advances in SNEDDS for anticancer drug delivery
19. Advances in nanocrystals for anticancer drug delivery
20. Theranostic nanoparticles for advanced cancer therapy
21. DNA-based nanomaterials for anticancer therapy
22. Nanofibrous scaffolds for cancer management
23. Advances in hydrogel for anticancer drug delivery
24. Advances in inorganic nanocarriers for anticancer drug delivery
25. Microparticles for anticancer drug delivery
26. Microneedles for anticancer drug delivery
27. Implants for anticancer drug delivery

- 28. Phytomedicine for cancer therapy
- 29. Enzyme-prodrug as advanced cancer therapeutics

III. CLINICAL STATUS, CHALLENGES AND FUTURE PROSPECTIVES

- 30. Clinical status of anticancer drug delivery systems
- 31. Challenges and future perspectives in anticancer drug delivery
- 32. Regulatory considerations for anticancer drug delivery systems