

1. Record Nr.	UNINA9910897991303321
Autore	Kasai Hitoshi
Titolo	Nanomedicines for Effective Cancer Therapy // edited by Hitoshi Kasai, Hiroshi Uji-i, Johan Hofkens
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9752-88-4
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (304 pages)
Collana	Nanomedicine and Nanotoxicology, , 2194-0460
Altri autori (Persone)	Uji-iHiroshi HofkensJohan
Disciplina	620.19
Soggetti	Biomaterials Cells Nanomedicine Medicinal chemistry Cancer - Treatment Drug delivery systems Materials - Microscopy Biomaterials-Cells Nanomedicine and Nanotoxicology Medicinal Chemistry Cancer Therapy Drug Delivery Microscopy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Most recent designs of nano-prodrugs for Hydroxy camptothecin and Podophyllotoxin -- Pt(II)-diradical complex toward theranostics of cancer -- Design of novel self assembling based drugs -- Innovative gene/nucleic acid delivery system based on optimized intracellular trafficking steps -- Novel targeted therapeutic nano-sized, micro-sized particles as DDS for brain tumor -- Designs of non-toxic and multifunctional nanocarriers for cancer therapy -- Cancer microenvironment-targeted therapy by molecular blocks -- Functional polymer-based siRNA delivery carrier that recognizes site-specific

biosignals -- Nanowire-based nanoscopy for intracellular PH sensing -- Bioanalytical nanoprobes and microfluidics -- Improvement of Multi-photon Microscopy by Utilizing Novel Optical Technologies and Materials -- Intracellular imaging using quantum dots -- Intracellular investigation of prodrug nanoparticles -- Polymeric Nanoparticles for Highly Efficient Multifunctional Drug Delivery Systems -- From 2D to 3D Cancer Cell Models—The Enigmas of Drug Delivery Research -- Control of the Formation Process of Polypeptide Self-assemblies for Understanding Complex Biological Systems: From Nano-physiology to Artificial Cells.

---

Sommario/riassunto

This book describes in detail the most up-to-date designs and fabrication techniques for nanomedicines toward effective cancer therapy, while especially emphasizing the biological interaction of nanomedicines at the cellular level, through comprehensive and visual cutting-edge technologies. Unlike other books on the general subject of medicine or drug delivery, this book provides readers the comprehensive information regarding what happens to the nanomedicine at the cell membrane surface, uptake mechanism, and what biochemical process it undergoes inside the cellular matrix. This full overview of the interaction between nanomedicines and cells also provides insights of how to design nanomedicines for effective cancer therapy. .

---