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Descrizione fisica	1 online resource (408 pages)
Collana	Handbook of Experimental Pharmacology, , 1865-0325 ; ; 284
Disciplina	615.6
Soggetti	Pharmacy Pharmacology Medicine - Research Biology - Research Clinical medicine - Research Pharmacovigilance Translational Research Clinical Research Drug Safety and Pharmacovigilance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I. Nanoparticles and other Advanced Technologies -- Knowledge-based design of multi-functional polymer-based nanoparticles -- Stimuli-responsive non-viral nanoparticles for gene delivery -- Sustainability in drug and nano-particle processing -- Advanced formulation approaches for proteins -- Microneedles and polymer films -- delivery of peptides, proteins and nucleic acids -- Advances in vaccine delivery enhancers -- small molecules and nanomaterials -- Biodegradable long acting injectables: Platform technology and industrial challenges -- Part II. Visualization Technologies -- Visualization of Nano-carriers and Drugs in Cells and Tissue -- Characterization of drug delivery systems by transmission electron microscopy -- Part III. Target Specific Delivery -- Blood-brain barrier-crossing strategies for improved treatment of CNS disorders -- Interactions of nano-systems with immune cells and cancer cells -- a

roadmap to clinical use?- Progress in ocular drug delivery: challenges and constraints -- New therapeutic options in pulmonal diseases – sphingolipids and sphingolipid metabolism -- Molecular therapeutics for pulmonary diseases – the need for drug targeting -- Delivery of mitochondrial RNA -- Part IV. Concerted Actions – Thinking the Drug from the Beginning -- ATMP formulations and delivery -- Preclinical testing and approval of ATMP -- Looking to the future – drug delivery in the prophylaxis and therapy of severe and chronic diseases.

Sommario/riassunto

Since the publication of the Handbook of Experimental Pharmacology Vol. 197 in 2010 there have been important advances in drug development, drug delivery and – more recently – drug targeting. This is in particular relevant with the new generation of drugs acting on the immune system and tumors. These are quite often accompanied by major adverse reactions. Safe therapy is, therefore, an important area of research, in particular in chronic diseases and in persons of old age. In addition, the Covid-19 pandemic has brought renewed attention to vaccinations against viral infections, and mRNA vaccines have been tested for vaccination in tumor therapy, too. Vaccine delivery has stimulated important research on carriers which may pave the way for other applications and enhance a path to e.g. CRISPR-cas therapy.
