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Titolo	Drug Transporters in Drug Disposition, Effects and Toxicity [[electronic resource] /] / edited by Xiaodong Liu, Guoyu Pan
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ISBN	981-13-7647-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (588 pages)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1141
Disciplina	615.1
Soggetti	Pharmacology Pharmacy Medicinal chemistry Pharmacology/Toxicology Drug Safety and Pharmacovigilance Medicinal Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Overview: role of drug transporters in drug disposition and its clinical significance -- ABC family transporters -- SLC family transporters -- Current research method in transporter study -- Transporter-mediated drug–drug interactions and their significance -- Roles of hepatic drug transporters in drug disposition and liver toxicity -- Roles of renal drug transporter in drug disposition and renal toxicity -- Intestinal transporter associated toxicity and absorption -- Contributions of drug transporters to blood-brain barriers -- Contributions of drug transporters to blood-retinal barrier(BRB) -- Contributions of drug transporters to blood-placental barrier -- ABC transporter-mediated multidrug-resistant cancer.
Sommario/riassunto	This book provides with a comprehensive overview of the role of drug transporters in drug disposition and efficacy/toxicity, as well as drug-drug interactions and recent advances in the field. Transporters are known determinants of drug disposition and efficacy/toxicity. In general, they are divided into solute carrier (SLC) and ATP binding cassette (ABC) families, and are located along cell membranes, where they mediate drug uptake into cells and export out of cells. Drug

transporters are essential in maintaining cell homeostasis, and their gene mutations may cause or contribute to severe human genetic disorders, such as cystic fibrosis, neurological disease, retinal degeneration, anemia, and cholesterol and bile transport defects. Conversely, some diseases may also alter transporter functions and expressions, in turn aggravating disease process. Further, since over-expression of some ABC transporters is a potential contributor to multidrug-resistance (MDR), the book presents a number of strategies to overcome MDR, including ABC transporter inhibitors and applying epigenetic methods to modulate transporter expressions and functions. This book is useful for graduate students and professionals who are looking to refresh or expand their knowledge of this exciting field.