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Nota di contenuto	Introduction of computational pharmaceutics / Ouyang -- Crystal energy landscapes for aiding crystal form selection / Sarah Price -- Solubilization of poor-soluble drugs in cyclodextron formulation / Ouyang -- Molecular modeling for polymeric and micellar drug delivery / Sharon M.Loverde -- Solid dispersion : a pragmatic method to improve the bioavailability of poorly soluble drugs / Ouyang -- Computer simulations of lipid membranes and liposomes for drug delivery / Becky Notman -- Molecular modeling for protein aggregation and formulation / Jim Warwicker -- Computational simulation of drug delivery by nano-materials at molecular level / Youyong Li -- Molecular and analytical modeling of nanodiamond for drug delivery applications / Amanda Barnard -- Molecular modeling of LDH drug delivery systems / Vinuthaa Murthy -- Molecular dynamics simulation as a tool to study the efficacy of PEGylation / Alex Bunker -- Synchrotron radiation micro computed tomography : a new approach for quantitative 3D structural architecture of drug delivery systems / Jiwen Zhang -- Pharmacokinetic modelling and simulation in drug delivery / Raj.
Sommario/riassunto	Molecular modeling techniques have been widely used in drug

discovery fields for rational drug design and compound screening. Now these techniques are used to model or mimic the behavior of molecules, and help us study formulation at the molecular level. Computational pharmaceutics enables us to understand the mechanism of drug delivery, and to develop new drug delivery systems. The book discusses the modeling of different drug delivery systems, including cyclodextrins, solid dispersions, polymorphism prediction, dendrimer-based delivery systems, surfactant-based micelle, poly