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Nota di contenuto	1. Design Principles of Ionic Liquids for drug delivery systems -- 2. Ionic liquids as active pharmaceutical ingredients (APIs) -- 3. Ionic liquids for topical and transdermal drug delivery -- 4. Ionic liquids for enhanced solubility of sparingly soluble drug molecules -- 5. Ionic liquids for the preparation of biopolymer materials for drug delivery -- 6. Ionic liquid based oral drug delivery systems -- 7. Polymer-based drug delivery systems comprising ionic liquids -- 8. Ionic liquids as strategic tools to improve the performance of drug delivery systems -- 9. Ionic liquid surfactants for medical and pharmaceutical applications -- 10. Ionic liquids for transdermal cancer immune therapy -- 11. Ionic liquids as potential antimicrobial agents -- 12. Ionic liquid assisted emulsions for drug delivery -- 13. Design and selection of ionic liquids via COSMO-RS for pharmaceutics and medicine.
Sommario/riassunto	This book presents recent advances in the use of ionic liquids in medicine and pharmaceutics with particular emphasis on addressing critical pharmaceutical challenges, including the low solubility, polymorphism, and bioavailability of drugs. It also provides insights

into the development of the biologically functionalized ionic liquids suitable for medical and pharmaceutical applications. Ionic liquids have been used as potential solvents or materials in the fields of pharmaceutical drug delivery and formulations because of their unique and tunable physicochemical and biological properties. Readers find explanations of the diverse approaches to the application of ionic liquids in drug solubility, active pharmaceutical ingredient (API) formulation, and drug delivery systems, such as topical, transdermal, and oral delivery, with particular emphasis on recent developments. Particular attention is given to the development of ionic liquid-assisted effective drug delivery techniques for sparingly soluble or insoluble drug molecules. This book also discusses the biological activities of ionic liquids for possible applications in drug formulation and drug delivery systems. Scientists in disciplines such as chemistry, biology, and pharmaceuticals find this book instructive and informative for developing ionic liquid-based drug formulations or drug delivery systems.
