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Autore	Rams-Baron Marzena
Titolo	Amorphous Drugs : Benefits and Challenges / / by Marzena Rams-Baron, Renata Jachowicz, Elena Boldyreva, Deliang Zhou, Witold Jamroz, Marian Paluch
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ISBN	3-319-72002-3
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (230 pages) : illustrations (some color)
Disciplina	615.19
Soggetti	Pharmaceutical chemistry Pharmaceutical technology Phase transformations (Statistical physics) Thermodynamics Ceramics Glass Composite materials Biomedical engineering Medicinal Chemistry Pharmaceutical Sciences/Technology Phase Transitions and Multiphase Systems Ceramics, Glass, Composites, Natural Materials Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Why amorphous drugs? -- Order vs. disorder in the solid state -- Amorphous drug solubility and absorption enhancement -- Amorphous drug preparation methods -- Physical instability - a key problem of amorphous drugs -- Amorphous drug formulation.
Sommario/riassunto	This book explains theoretical and technological aspects of amorphous drug formulations. It is intended for all those wishing to increase their knowledge in the field of amorphous pharmaceuticals. Conversion of

crystalline material into the amorphous state, as described in this book, is a way to overcome limited water solubility of drug formulations, in this way enhancing the chemical activity and bioavailability inside the body. Written by experts from various fields and backgrounds, the book introduces to fundamental physical aspects (explaining differences between the ordered and the disordered solid states, the enhancement of solubility resulting from drugs amorphization, physical instability and how it can be overcome) as well as preparation and formulation procedures to produce and stabilize amorphous pharmaceuticals. Readers will thus gain a well-funded understanding and find a multi-faceted discussion of the properties and advantages of amorphous drugs and of the challenges in producing and stabilizing them. The book is an ideal source of information for researchers and students as well as professionals engaged in research and development of amorphous pharmaceutical products. .

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