1. Record Nr. UNINA9910767526003321 Autore Repka Michael A Titolo 3D Printing: Emerging Technologies and Functionality of Polymeric Excipients in Drug Product Development / / edited by Michael A. Repka, Nigel Langley Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2024 3-031-46015-4 ISBN Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (287 pages) Collana AAPS Advances in the Pharmaceutical Sciences Series, , 2210-738X ; ; 44 Altri autori (Persone) LangleyNigel Disciplina 621.988 Soggetti Pharmaceutical chemistry Pharmacology Biotechnology Biology - Technique **Pharmaceutics** Biological Techniques Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Overview of Pharmaceutical 3D Printing Technologies -- Clinical Benefit Nota di contenuto of 3D Printed Products -- Characterization or Quality Control of 3D Printed Products -- Polymers for HME based 3D Printing -- Cellulosic Polymers -- API and Polymer Selection Formulation and Process Variables -- Fused Deposition Modeling 3D Printing.-Semi-solid Extrusion Printing and 3D -- Future Trends Including Novel Polymeric Excipients Designed for Purpose Bioprinting. Sommario/riassunto This book is an educational text and guide for the use and properties of key polymeric excipients in the area of 3D printing in drug development. It is written by both industry experts and academic researchers. The particular focus is on hot melt extrusion and the extruded filaments suitable for optimizing the 3D printing in drug development. 3D Printing Polymeric Excipients, Technology, and Drug Formulation Development covers regulatory aspects as well as the manufacturing aspects.