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Titolo	Additive Manufacturing in Pharmaceuticals // edited by Subham Banerjee
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ISBN	9789819924042 9819924049
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Descrizione fisica	1 online resource (378 pages)
Disciplina	615.6
Soggetti	Pharmaceutical chemistry Drug delivery systems Pharmacology Pharmaceutics Drug Delivery Tecnologia farmacèutica Impressió 3D Medicaments Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. History and Present Scenario of Additive Manufacturing in Pharmaceuticals -- 2. Fused deposition modeling (FDM) of Pharmaceuticals -- 3. Stereolithography (SLA) in Pharmaceuticals -- 4. Selective Laser Sintering (SLS) In Pharmaceuticals -- 5. Semi-solid Extrusion (SSE) in Pharmaceuticals -- 6. Inkjet and Binder Jet Printing in Pharmaceuticals -- 7. 4D printing: The next dimension of healthcare in cancer research -- 8. 4D Printing in Pharmaceuticals -- 9. Bioprinting in Pharmaceuticals -- 10. Regulatory Perspective of Additive Manufacturing in the Field of Pharmaceuticals -- 11. Machine Learning in Additive Manufacturing of Pharmaceuticals. .
Sommario/riassunto	This book presents the different 3D/4D printing technological applications of Additive Manufacturing (AM) in Pharmaceutical Sciences. The initial chapter provides the historical perspective and current

scenario of AM in pharmaceuticals. The book further discusses about different 3D printing platform technologies such as FDM, SLA, SLS, SSE, Ink-jet & binder jet principles & applications in developing advanced drug delivery systems. It also covers the methodology, materials for AM and important parameters associated with these platform technologies. The book highlights the progress and practical applications of 4D-printing technology in healthcare & pharmaceuticals fraternity as well including the essence of bioprinting in pharmaceuticals. Finally, the book reviews the regulatory guidelines, perspectives, and integration of Artificial Intelligence (AI)/Machine learning (ML) in pharmaceutical AM. This book is indeed a valuable resource for students, researchers/scholars, young start-ups/entrepreneurs, and pharmaceutical professionals by providing thorough detailing about AM in Pharmaceuticals.
