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Nota di contenuto	1. Conducting polymers as drug release systems -- 2. Electrospinning for drug delivery applications -- 3. Melt-electrospinning and electrowriting for pharmaceutical and biomedical applications -- 4. Pharmaceutical Spray Drying -- 5. Vat photopolymerization 3D printing for drug delivery applications -- 6. Semi-solid extrusion 3D printing for the development of dosage forms for special patient groups -- 7. Binder-Jetting Powder bed 3Dprinting for the fabrication of drug delivery systems -- 8. 3D printing for localized cancer therapy -- 9. 4D Printing in Pharmaceuticals & Biomedical Applications -- 10. Lithography in Drug-Delivery -- 11. Micro-moulding and its application to drug delivery -- 12. Supercritical Fluids: A Promising Technique in Pharmaceuticals -- 13. Microfluidics as a tool for the synthesis of advanced drug delivery systems -- 14. Nanofluidic Technologies for Drug Screening and Drug Delivery -- 15. Nanoparticles at the stage of clinical trials -- 16. Nasal drug delivery systems for the treatment of diseases of the central nervous system and tuberculosis -- 17. Regulatory aspects and barriers in using ground-breaking technologies. .

New materials and manufacturing techniques are evolving with the potential to address the challenges associated with the manufacture of medicinal products that will teach new tricks to old drugs. Nano- and microfabrication techniques include manufacturing methods such as additive manufacturing, lithography, micro-moulding, spray drying, and supercritical fluids among many others. The increasing resolution of new techniques allow researchers to produce objects with micrometric resolutions. This book follows a consecutive order, beginning with a background in the current field and limitations in the manufacturing of different pharmaceutical products, moving on the classification of each method by providing recent examples, and future prospective on a variety of traditional and new Nano and microfabrication techniques. A focus on the materials used to prepare these systems and their biocompatibility, including applied topics such as clinical applications and regulatory aspects also covered, offering the reader a holistic view of this rapidly growing field.
