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Nota di contenuto	Introduction -- Importance of Finely Divided Solids in Pharmaceutical Dosage Forms -- Solid State Chemistry -- Crystallization -- Physical Properties -- Particle Size and Size Distribution -- Particle Size Characterization -- Fundamental of Particle Interactions -- Powder and Particle Dependent Traditional Manufacturing Processes (unit operations) -- Powder and Particle Dependent Biopharmaceutical Processes -- Recent and Evolving Manufacturing Processes -- Principles of Quality by Design -- General Discussion.
Sommario/riassunto	This book in the AAPS book series concisely reviews important aspects of powder and particle systems and the critical quality attributes that should be used as a guide to future developments intended to maximize the control of product quality and performance. Hickey and Giovagnoli have written an essential book for any scientists involved in powder or particle research and manufacturing. It is appropriate for those just entering the field or as a rapid reference for the experienced pharmaceutical scientist. The authors have both academic and industrial experience, and the coverage includes solid state chemistry; crystallization; physical processes; particle size and distribution; particle interaction; manufacturing processes; quality by design; and a

general discussion of the industry. Pharmaceutical Powder and Particles is intended to concisely review important aspects of powder and particle systems and the critical quality attributes that should be used as a guide to future developments intended to maximize the control of product quality and performance. Innovation in manufacturing has expanded the range of options available for solid dosage form manufacture while continuing to rely on first principles of solid-state chemistry and characterization methods for powders and particles. In this new edition, the authors have expanded on existing chapters and added sections on new developments in the recent and evolving manufacturing processes including additive manufacturing technologies, controlled crystallization, spray-freeze-drying technology, and more. The editors have also comprehensively updated the references throughout the entire book. .
