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Distortions; III. Simulating Solute Effects through Short Range Back Stresses; IV. Using the Models; V. Summary
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Chapter 5. The Constitutive Law of Deformation Kinetics; I. Introduction; II. The Kinetics Equation; III. The State Equations; IV. Measurement and Analysis of the Characteristic Microstructural Quantities; V. Comments and Summary; References; Chapter 6. A Small-Strain Viscoplasticity Theory Based on Overstress; I. Introduction; II. Viscoplasticity Theory Based on Overstress; III. Discussion; References; Chapter 7. Anisotropic and Inhomogeneous Plastic Deformation of Polycrystalline Solids; I. Introduction; II. Constitutive Relations for a Single Crystallite
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Sommario/riassunto

High-technology industries using plastic deformation demand soundly-based economical decisions in manufacturing design and product testing, and the unified constitutive laws of plastic deformation give researchers a guideline to use in making these decisions. This book provides extensive guidance in low cost manufacturing without the loss of product quality. Each highly detailed chapter of Unified Constitutive Laws of Plastic Deformation focuses on a distinct set of defining equations. Topics covered include anisotropic and viscoplastic flow, and the overall kinetics and thermodynamics
