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Nota di contenuto	1 Analysis of a Power Plant Rotor Made of Tempered Martensitic Steel based on a Composite Model of Inelastic Deformation -- 2 Computational assessment of the microstructure-dependent thermomechanics -- 3 Problems of Thick Functionally Graded Material Structures Under Thermomechanical Loadings -- 4 Structural analysis of gas turbine blades made of Mo-Si-Bunder stationary thermo-mechanical loads.
Sommario/riassunto	This book presents a collection of contributions on advanced approaches to the mechanics of materials and mechanics of structures for high-temperature applications, such as power plant components, engines and turbochargers. The contributions highlight advanced constitutive models for high-temperature materials, as well as new approaches to the efficient modeling and analysis of engineering structures operating in high-temperature environments.