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Titolo	Alloys Based on TiNi in Pre-transition Low-Stability States : Structure and Properties // by Alexander I. Potekaev, Anatoly A. Klopotov, Valentina V. Kulagina, Yulia V. Solov'eva, Sergey G. Anikeev
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Nota di contenuto	1. CRYSTALLOGEOMETRIC AND CRYSTALLO-CHEMICAL CHARACTERISTICS OF METALLIC COMPOUNDS. SIZE EFFECTS IN METALLIC SYSTEMS -- 2. Pre-transitional weakly stable states and views on the influence of point and planar defects and their complexes on structural-phase transformations in condensed systems -- 3. Pre-transitional Weakly Stable States in TiNi-based Alloys -- 4. Influence of Structural Defects, Weakly Stable Pre-transitional States and Phase-Structural Transformations on Alloy Stability -- 5. Crystallogometry of structures in Ti-Ni-Me systems.
Sommario/riassunto	This book presents the results of research on the regularities during thermocyclic impact on changes in structural-phase states of functional alloys with low-stability or instability in the area of structural-phase transformations. Without clarification of the physical regularities of the influence of thermomechanical impact on the properties of alloys, it is impossible to develop technological processes of processing functional

materials; therefore, the book widely uses the results of many years of research by the authors of the book. It is known that critical temperatures and stresses for martensitic transformation, for example, B 2 B 19, in NiTi are very sensitive to cycling. The study of structural-phase states, corresponding to changes in physical-mechanical properties of intermetallics in the area of transformations, is a necessary aspect of understanding the nature of the influence of thermomechanical cycling on the properties of functional alloys. This book is dedicated to the fundamental physical aspects of stability, the influence of structural defects on properties and structural-phase transformations of FCC alloys. This book is useful for a wide range of specialists—scientific researchers and engineers, working in the field of materials science and physics of condensed systems, as well as teachers, postgraduates and students, specializing in the field of materials science.
