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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction to Shape Memory Alloys -- Production and processing of SMA components -- Need Analysis for Design of SMA components/structures -- Factors influencing design of SMA Actuators -- Stroke estimation.
Sommario/riassunto	This short monograph presents an analysis and design methodology for shape memory alloy (SMA) components such as wires, beams, and springs for different applications. The solid-solid, diffusionless phase transformations in thermally responsive SMA allows them to demonstrate unique characteristics like superelasticity and shape memory effects. The combined sensing and actuating capabilities of such materials allows them to provide a system level response by combining multiple functions in a single material system. In SMA, the combined mechanical and thermal loading effects influence the functionality of such materials. The aim of this book is to make the

analysis of these materials accessible to designers by developing a "strength of materials" approach to the analysis and design of such SMA components inspired from their various applications with a review of various factors influencing the design process for such materials.