



Design of Shape Memory Alloy (SMA) Actuators

By Ashwin Rao

Springer-Verlag GmbH Jul 2015, 2015. Taschenbuch. Book Condition: Neu. 236x161x15 mm. Neuware - 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. 130 pp. Englisch.

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Reviews

Very helpful to all of class of folks. This is certainly for all who statte there had not been a worthy of studying. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Jayda Lehner Jr.**

This book is definitely not easy to get going on reading but extremely entertaining to learn. It is actually filled with knowledge and wisdom I am very easily will get a delight of reading a composed ebook.

-- **Krystina Breitenberg**