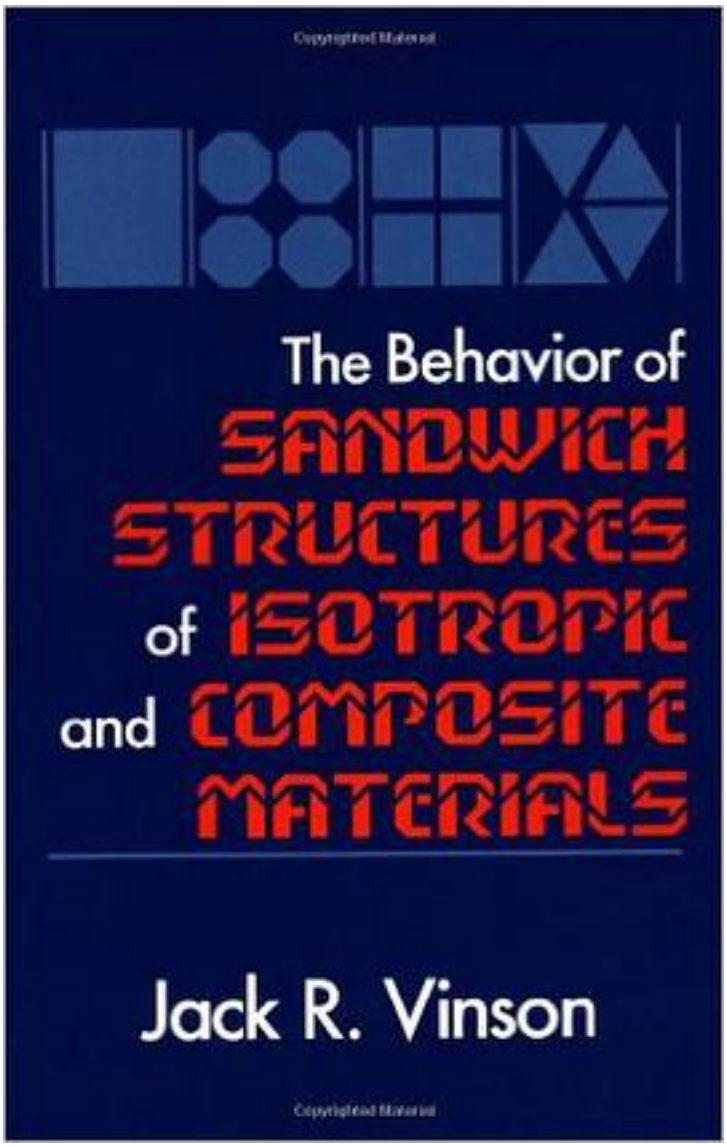
The Behavior of Sandwich Structures of Isotropic and Composite Materials



The Behavior of Sandwich Structures of Isotropic and Composite Materials_下载链接1_

著者:Vinson, Jack R.

出版者:CRC Pr I Llc

出版时间:1999-3-31

装帧:HRD

isbn:9781566766999

Features

Provides the means to analyze, design, and optimize various sandwich structures

Presents the properties of honeycomb- and solid-core materials

Explores the fields of soil and crop science, agricultural engineering, wastewater and sludge treatment, and soil microbiology

Covers anisotropic elasticity, laminate theory, flat sandwich panels, and more

Contains more than 800 formulas, tables, and figures that reinforce concepts

Summary

The Behavior of Sandwich Structures of Isotropic and Composite Materials presents the mathematics, descriptions, and analytical techniques in the growing field of sandwich structures. From a background in sandwich structures to thermoelastic problems of sandwich structures and sandwich shell theory, the book provides the knowledge needed to analyze, design, and optimize various sandwich structures.

As one would expect from a book on sandwich structures, this volume discusses special failure modes such as face wrinkling and core shear instability. Coverage includes not only honeycomb cores, but also foam, web, and truss cores. An important topic in composite structure design, optimization is explored in two chapters on sandwich plates and sandwich shells. The author presents the optimization techniques in closed form and the methods are applicable to material selection and geometric design. The book also contains a set of problems and references at the end of each chapter. This text is ideal for engineers-in-training, as well as practical engineers who desire a comprehensive understanding of sandwich structures technology.

作者介绍:

目录: SANDWICH STRUCTURES: ORIGINS, ADVANTAGES, AND USES

The Behavior of Sandwich Structures of Isotropic and Composite Materials_下载链接1_

标签

评论

The Behavior of Sandwich Structures of Isotropic and Composite Materials_下载链接1_

书评

The Behavior of Sandwich Structures of Isotropic and Composite Materials_下载链接1_