

## Composites

Modeling, and Manufacturing

The text emphasizes the importance of modeling in the initial design phase of a composite component. It covers a wide range of modeling techniques and Multiphysics simulation using finite elements. It further provides practical examples and details studies that demonstrate the application of modeling techniques to real-world application of composite structures.

This book: - Discusses manufacturing of different types of composite components using different techniques, and static and dynamic analysis of composites using FE modeling. - Covers the machining performance of carbon nanotubes reinforced nanocomposites and multi-scale modeling techniques in composites. - Presents a details study on ceramics matrix composite using modern machining operation, and hybrid nanocomposite using conventional machining operation. - Highlights the development of hybrid nanocomposites and their tribological characteristics. - Illustrates

Implementation of biomimicry for advanced impact resistant of composites and degradations of polyamides for future prospects. It is primarily written for senior undergraduates, graduate students, and academic researchers in the fields of mechanical engineering, manufacturing engineering, materials science, production engineering, industrial engineering, and aerospace engineering.

**108,50 €**

101,40 € (zzgl. MwSt.)

*vorbestellbar, Erscheinungstermin ca. Dezember 2024*

**Artikelnummer:** 9781032744575

**Medium:** Buch

**ISBN:** 978-1-032-74457-5

**Verlag:** Taylor & Francis Ltd

**Erscheinungstermin:** 31.12.2024

**Sprache(n):** Englisch

**Auflage:** 1. Auflage 2024

**Serie:** Engineering Tribology, Manufacturing and Applied Energy

**Produktform:** Gebunden

**Seiten:** 264

**Format (B x H):** 156 x 234 mm

