

Nanofluids Technology for Thermal Sciences and Engineering

Research, Development, and Applications

This text highlights how nanofluids can be used in thermal solutions across multiple industries, including electronics, energy, and manufacturing. It emphasizes the enhanced heat transfer properties of nanofluids and their potential to significantly improve the efficiency of heat exchange processes. This book discusses topics such as nanoparticle synthesis, nanofluid testing, performance enhancement using nanofluids, thermal behavior of hybrid nanofluids, Brinkman equation in nanofluids and safety considerations in nano fluid-based systems. This book: - Discusses the recent innovation, technological development of nanofluids and explores nanoparticle synthesis and characterization for nanofluid development - Offers a comprehensive understanding of nanofluid technology and nanofluid for aerospace application, covering diverse topics from fundamental properties to advanced research frontiers in nanofluids for thermal engineering - Includes real-world case studies and practical techniques that will help the readers to apply nanofluid technology in various thermal engineering scenarios - Covers heat exchanger performance improvement with nanofluids, hybrid nanofluids, Flow of Newtonian and Non-Newtonian hybrid Nanofluid, and oil-based Tri-hybrid Nanofluid - Explains experimental techniques for nanofluid testing and validation and presents safety and environmental considerations in nanofluid-based systems It is primarily written for senior undergraduates, graduate students, and academic researchers in the fields of manufacturing engineering, industrial engineering, production engineering, mechanical engineering, automotive engineering, and aerospace engineering.



215,60 €

201,50 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781032799117

Medium: Buch

ISBN: 978-1-032-79911-7

Verlag: CRC Press

Erscheinungstermin: 28.08.2024

Sprache(n): Englisch

Auflage: 1. Auflage 2024

Serie: Advances in Manufacturing,
Design and Computational Intelligence
Techniques

Produktform: Gebunden

Gewicht: 690 g

Seiten: 350

Format (B x H): 161 x 240 mm

