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to Heat Transfer; Chapter 15: Fundamentals of Conductive Heat Transfer; Chapter 16: Thermal Conductivity of Composites; Chapter 17: Thermal Conductivity of Composites of Core-Shell Particles Chapter 18: Influence of Interfacial Contact Resistance on Thermal Conductivity of Composites Chapter 19: Thermal Diffusivity and Coefficient of Thermal Expansion of Composites; Chapter 20: Radiative Heat Transfer and Radiative Properties of Composites; Chapter 21: Fundamentals of Diffusion Mass Transfer; Chapter 22: Diffusion Mass Transfer in Composite Membranes; Chapter 23: Fundamentals of Convective Mass Transfer; Chapter 24: Convective Mass Transfer in Composite Materials; Back Cover

Sommario/riassunto

In the design, processing, and applications of composite materials, a thorough understanding of the physical properties is required. It is important to be able to predict the variations of these properties with the kind, shape, and concentration of filler materials. The currently available books on composite materials often emphasize mechanical properties and focus on classification, applications, and manufacturing. This limited coverage neglects areas that are important to new and emerging applications. For the first time in a single source, this volume provides a systematic, comprehensive, a
