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Descrizione fisica	1 online resource (XVI, 370 p. 144 illus.)
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Nota di contenuto	Part I: Basic Concepts -- Laws of Macroscopic Heat Transfer and Their Limits -- Transport in Dilute Media -- Electrons and Phonons -- Introduction to Radiative Transfer -- Part II: Models and Numerical Methods -- Solution of the Boltzmann Equation for Phonon Transport -- Radiative Transfer on Short Length Scales -- Monte Carlo Method -- Molecular Dynamics -- Part III: Experimental Methods and Applications -- Scanning Thermal Microscopy -- Optical Technique for Local Measurement -- Hybrid Techniques and Multipurpose Microscopes -- Electron-Phonon Interactions in Metals and Metallic Nanostructures -- Investigation of Short-Time Heat Transfer Effects by an Optical Pump-Probe Method.
Sommario/riassunto	The book constitutes a particularly complete and original collection of ideas, models, numerical methods and experimental tools which will prove invaluable in the study of microscale and nanoscale heat transfer.

It should be of interest to research scientists and thermal engineers who wish to carry out theoretical research or metrology in this field, but also to physicists concerned with the problems of heat transfer, or teachers requiring a solid foundation for an undergraduate university course in this area.