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Autore	D'Acunto Bernardino
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Nota di contenuto	Heat conduction and diffusion -- Finite-difference method -- Parabolic equations -- Finite element method -- Wave motions -- Elliptic equations -- Beam equation -- Diffusion in two and three space dimensions -- Elements of linear algebra -- Classification of PDEs.
Sommario/riassunto	Metamaterials - artificial materials with engineered electromagnetic properties - is a young, but rapidly growing topic that breaks down traditional rules, and fascinates scientists in the field of physics, optics and electromagnetics. One of the major breakthroughs in the development of metamaterials is the cloaking device for obtaining electromagnetic invisibility, which can bend light around an object as if it weren't there. The design of the cloaking device is realised by the co-ordinate transformation technique, which is based on the fact that Maxwell's equations are form-invariant under co-ordinate transformations. This book presents a variety of transformation media, based on two interpretations of the co-ordinate transformation technique.