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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Basics of the finite difference approximations -- Principles of the implicit Keller-box method -- Stability and convergence of the implicit Keller-box method -- Application of the Keller-box method to boundary layer problems -- Application of the Keller-box method to fluid flow and heat transfer problems -- Application of the Keller-box method to more advanced problems.
Sommario/riassunto	Most of the problems arising in science and engineering are nonlinear. They are inherently difficult to solve. Traditional analytical approximations are valid only for weakly nonlinear problems, and often break down for problems with strong nonlinearity. This book presents the current theoretical developments and applications of the Keller-box method to nonlinear problems. The first half of the book addresses basic concepts to understand the theoretical framework for the method. In the second half of the book, the authors give a number of examples of coupled nonlinear problems that have been solved by means of the Keller-box method. The particular area of focus is on fluid flow problems governed by nonlinear equation.