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Nota di contenuto	Theoretical Introduction -- One-Dimensional Continuum Approach -- One-Dimensional Finite Element Approach -- Three-Dimensional Finite Element Approach -- Summary and Outlook -- FORTRAN Source Codes.
Sommario/riassunto	This volume demonstrates the use of FORTRAN for numerical computing in the context of the finite element method. FORTRAN is still an important programming language for computational mechanics and all classical finite element codes are written in this language, some of them even offer an interface to link user-code to the main program. This feature is especially important for the development and investigation of new engineering structures or materials. Thus, this volume gives a simple introduction to programming of elasto-plastic material behavior, which is, for example, the prerequisite for implementing new constitutive laws into a commercial finite element program.