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Nota di contenuto	Generation of elastic acoustic emission waves due to the fracture of solids -- Propagation of elastic waves in solids -- Analysis of acoustic emission caused by internal cracks -- Some methodological foundation for selection and processing of signals -- Evaluation of mechanical characteristics and static crack growth resistance of materials with using aes -- Some aspects of applying the acoustic emission method.
Sommario/riassunto	This monograph analyses in detail the physical aspects of the elastic waves radiation during deformation or fracture of materials. I presents the methodological bases for the practical use of acoustic emission device, and describes the results of theoretical and experimental researches of evaluation of the crack growth resistance of materials, selection of the useful AE signals. The efficiency of this methodology is shown through the diagnostics of various-purpose industrial objects. The authors obtain results of experimental researches with the help of the new methods and facilities.