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Altri autori (Persone)	DrumhellerDouglas Schaeffer <1942->
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Nota di contenuto	Chapter 1 Linear Elasticity -- Chapter 2 One-Dimensional Waves -- Chapter 3 Steady-State Waves -- Chapter 4 Transient Waves -- Chapter 5 Nonlinear Wave Propagation. .
Sommario/riassunto	This revised and updated edition expands on its explanations of methods used to analyze waves in solid materials, such as the waves created by earthquakes and the ultrasonic waves used to detect flaws in materials and for medical diagnoses. In addition to the traditional methods used to analyze steady-state and transient waves in elastic materials, the book contains introductions to advanced areas that no other single text covers. These topics include the use of finite elements

to solve wave problems, the Cagniard-de Hoop method, the four-pole technique for analyzing waves in layered media, and the growth and decay of shock and acceleration waves. The authors explain the theory of linear elasticity through the displacement equations of motion, methods used to analyze steady-state and transient waves in layered media, and include an appendix on functions of a complex variable. Originally developed for a graduate course for which no suitable text existed, the new edition retains its classroom-tested treatment of the theories of linear elasticity and complex variables for students needing background in those subjects. Discusses the traditional methods used to analyze steady-state and transient waves in linear elastic materials; Introduces advanced topics such as the four-pole solution for layered media and waves in nonlinear elastic materials; Includes many exercises with solutions.
