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ISBN	1-118-69832-0 1-118-69833-9 1-118-69835-5 1-118-69834-7
Descrizione fisica	1 online resource (264 p.)
Disciplina	534/.22
Soggetti	Nonlinear acoustics Elastic wave propagation Elastic solids Inhomogeneous materials Microstructure
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Nonlinear wave processes in homogeneous media -- Physical models and mechanisms of the structure nonlinearity of micro-inhomogeneous media with cracks and cavities -- Elastic waves in media with strong acoustic nonlinearity -- Wave processes in micro-inhomogeneous media with hysteretic nonlinearity -- Wave processes in nonlinear micro-inhomogeneous media with relaxation -- Wave processes in the polycrystalline solids with dissipative and elastic nonlinearity caused by dislocations -- Experimental studies of the nonlinear acoustic phenomena in polycrystalline rocks and metals -- Experimental studies of nonlinear acoustic phenomena in granular media -- Nonlinear phenomena in seismic waves.
Sommario/riassunto	Nonlinear Acoustic Waves in Micro-inhomogeneous Solids covers the broad and dynamic branch of nonlinear acoustics, presenting a wide variety of different phenomena from both experimental and theoretical perspectives. The introductory chapters, written in the style of

graduate-level textbook, present a review of the main achievements of classic nonlinear acoustics of homogeneous media. This enables readers to gain insight into nonlinear wave processes in homogeneous and micro-inhomogeneous solids and compare it within the framework of the book. The subsequent eight chapters covering: Physical m

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