Record Nr. UNINA9910830182903321 Autore Royer D (Daniel) Titolo Elastic waves in solids . 1 Propagation / / Daniel Royer, Tony Valier-**Brasier** Pubbl/distr/stampa London, UK:,: ISTE Ltd Hoboken, NJ:,: John Wiley & Sons, Inc.,, 2022 ©2022 **ISBN** 1-119-90294-0 1-119-90292-4 Descrizione fisica 1 online resource (xv, 297 pages): illustrations (chiefly colour) Collana Waves series Disciplina 531.1133 Soggetti Elastic wave propagation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references (pages 287-293) and index. Nota di bibliografia Nota di contenuto Propagation in an Unbounded Solid -- Reflection and Transmission at an Interface -- Surface Waves and Interface Waves -- Guided Elastic Waves -- Appendix 1: Differential Operators in Cylindrical and Spherical Coordinates -- Appendix 2: Symmetry and Tensors --Appendix 3: Transport of Energy. Sommario/riassunto "Elastic waves are used in fields as diverse as the non-destructive evaluation of materials, medicine, seismology and telecommunications. Elastic Waves in Solids 1 presents the different modes of propagation of elastic waves in increasingly complex media and structures. It first studies the propagation in an unlimited solid where only the material properties are taken into account. It then analyzes reflection and transmission phenomena at an interface with a fluid or a second solid. It explains the search for propagation modes on a free surface or at the interface between two media. Finally, it proposes a study of the dispersive propagation of elastic waves guided by a plate or a cylinder. This book is intended for students completing a master's degree in acoustics, mechanics, geophysics or engineering, as well as teachers

and researchers in these disciplines."--Provided by publisher.