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Nota di contenuto	Preface -- Introduction -- I Continuum Mechanics -- II Specialized Continua -- III Beams with Cross-Sections and Plates with Thickness -- IV Buckling -- V Introduction to the Finite Element Method -- VI Mathematical Preliminaries -- Index.
Sommario/riassunto	The book opens with a derivation of kinematically nonlinear 3-D continuum mechanics for solids. Then the principle of virtual work is utilized to derive the simpler, kinematically linear 3-D theory and to provide the foundation for developing consistent theories of kinematic nonlinearity and linearity for specialized continua, such as beams and plates, and finite element methods for these structures. A formulation in terms of the versatile Budiansky-Hutchinson notation is used as basis for the theories for these structures and structural elements, as well as for an in-depth treatment of structural instability.