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Collana	Solid Mechanics and Its Applications, , 2214-7764 ; ; 12
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	I General Considerations -- 1 Introduction -- 2 Equilibrium and Compatibility -- II Two-Dimensional Problems -- 3 Plane Strain and Plane Stress -- 4 Stress Function Formulation -- 5 Problems in Rectangular Coördinates -- 6 End Effects -- 7 Body Forces -- 8 Problems in Polar Coördinates -- 9 Calculation of Displacements -- 10 Curved Beam Problems -- 11 Wedge Problems -- 12 Plane Contact Problems -- 13 Forces, Dislocations and Cracks -- 14 Thermoelasticity -- III Three Dimensional Problems -- 15 Displacement Function Solutions -- 16 The Boussinesq Potentials -- 17 Thermoelastic Displacement Potentials -- 18 Singular Solutions -- 19 Spherical Harmonics -- 20 Axisymmetric Problems -- 21 Frictionless Contact -- 22 The Boundary-Value Problem -- 23 The Penny-Shaped Crack -- 24 The Interface Crack -- 25 The Reciprocal Theorem.
Sommario/riassunto	The subject of Elasticity can be approached from several points of view, depending on whether the practitioner is principally interested in the mathematical structure of the subject or in its use in engineering

applications and in the latter case, whether essentially numerical or analytical methods are envisaged as the solution method. My first introduction to the subject was in response to a need for information about a specific problem in Tribology. As a practising engineer with a background only in elementary Strength of Materials, I approached that problem initially using the concepts of concentrated forces and superposition. Today, with a rather more extensive knowledge of analytical techniques in Elasticity, I still find it helpful to go back to these roots in the elementary theory and think through a problem physically as well as mathematically, whenever some new and unexpected feature presents difficulties in research. This way of thinking will be found to permeate this book. My engineering background will also reveal itself in a tendency to work examples through to final expressions for stresses and displacements, rather than leave the derivation at a point where the remaining manipulations would be routine. With the practical engineering reader in mind, I have endeavoured to keep to a minimum any dependence on previous knowledge of Solid Mechanics, Continuum Mechanics or Mathematics.
