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	Field Equations; 5.2 Boundary Conditions and Fundamental Problem Classifications; 5.3 Stress Formulation; 5.4 Displacement Formulation; 5.5 Principle of Superposition; 5.6 Saint-Venant's Principle; 5.7 General Solution Strategies Chapter 6. Strain Energy and Related Principles6.1 Strain Energy; 6.2 Uniqueness of the Elasticity Boundary-Value Problem; 6.3 Bounds on the Elastic Constants; 6.4 Related Integral Theorems; 6.5 Principle of Virtual Work; 6.6 Principles of Minimum Potential and Complementary Energy; 6.7 Rayleigh-Ritz Method; Chapter 7. Two-Dimensional Formulation; 7.1 Plane Strain; 7.2 Plane Stress; 7.3 Generalized Plane Stress; 7.4 Antiplane Strain; 7.5 Airy Stress Function; 7.6 Polar Coordinate Formulation; Chapter 8. Two-Dimensional Problem Solution; 8.1 Cartesian Coordinate Solutions Using Polynomials 8.2 Cartesian Coordinate Solutions Using Polynomials 8.2 Cartesian Coordinates; 8.4 Example Polar Coordinate Solutions; Chapter 9. Extension, Torsion, and Flexure of Elastic Cylinders; 9.1 General Formulation; 9.2 Extension Formulation; 9.3 Torsion Formulation; 9.4 Torsion Solutions Derived from Boundary Equation; 9.5 Torsion Solutions Using Fourier Methods; 9.6 Torsion of Cylinders with Hollow Sections; 9.7 Torsion of Circular Shafts of Variable Diameter; 9.8 Flexure Formulation; 9.9 Flexure Problems without Twist; PART II: ADVANCED APPLICATIONS Chapter 10. Complex Variable Methods
Sommario/riassunto	Elasticity: Theory, Applications and Numerics 2e provides a concise and organized presentation and development of the theory of elasticity, moving from solution methodologies, formulations and strategies into applications of contemporary interest, including fracture mechanics, anisotropic/composite materials, micromechanics and computational methods. Developed as a text for a one- or two-semester graduate elasticity course, this new edition is the only elasticity text to provide coverage in the new area of non-homogenous, or graded, material behavior. Extensive end-of-chapter exercises