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Nota di bibliografia	Includes bibliographical references and index
Nota di contenuto	Introduction -- Foundations of solid mechanics -- Green's functions, Eshelby, and related tensors -- Multiscale analysis of the multiple interacting inclusions problem: finite number of interacting inclusions -- Statistical description of composite materials -- Effective properties and energy methods in thermoelasticity of composite materials -- General Integral equations of micromechanics of composite materials -- Multiparticle effective field and related methods in micromechanics of random structure composites -- Some related methods in micromechanics of random structure composites -- Generalization of the MEFM in random structure matrix composites -- Periodic structures and periodic structures with random imperfections -- Nonlocal effects in statistically homogeneous and inhomogeneous random structure composites -- Stress fluctuations in random composites -- Random structure matrix composites in a half-space -- Effective limiting surfaces in the theory of nonlinear composites -- Nonlinear composites -- Some related problems -- Multiscale mechanics of nanocomposites -- Conclusion: Critical analysis of some basic concepts of micromechanics.