

1. Record Nr.	UNISALENTO991002010819707536
Autore	Tadmor, Ellad B., 1965-
Titolo	Modeling materials : continuum, atomistic, and multiscale techniques / Ellad B. Tadmor, Ronald E. Miller
Pubbl/distr/stampa	Cambridge ; New York : Cambridge University Press, 2011
ISBN	9780521856980
Descrizione fisica	xxviii, 759 p. : ill. ; 26 cm
Altri autori (Persone)	Miller, Ronald E.
Disciplina	620.1
Soggetti	Materials - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: 1. Introduction; Part I. Continuum Mechanics and Thermodynamics: 2. Essential continuum mechanics and thermodynamics; Part II. Atomistics: 3. Lattices and crystal structures; 4. Quantum mechanics of materials; 5. Empirical atomistic models of materials; 6. Molecular statics; Part III. Atomistic Foundations of Continuum Concepts: 7. Classical equilibrium statistical mechanics; 8. Microscopic expressions for continuum fields; 9. Molecular dynamics; Part IV. Multiscale Methods: 10. What is multiscale modeling?; 11. Atomistic constitutive relations for multilattice crystals; 12. Atomistic/continuum coupling: static methods; 13. Atomistic/continuum coupling: finite temperature and dynamics; Appendix; References; Index.