

1. Record Nr.	UNINA9910780812103321
Autore	Wilmanski Krzysztof
Titolo	Continuum thermodynamics [[electronic resource] /] by Krzysztof Wilmanski
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, 2008-
ISBN	1-282-44234-1 9786612442346 981-283-557-1
Descrizione fisica	1 online resource (416 p.)
Collana	Series on advances in mathematics for applied sciences ; ; v. 77
Disciplina	536/.7
Soggetti	Thermodynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (v. 1, p. 373-395) and index.
Nota di contenuto	pt. 1. Foundation --.
Sommario/riassunto	This book is a unique presentation of thermodynamic methods of construction of continuous models. It is based on a uniform approach following from the entropy inequality and using Lagrange multipliers as auxiliary quantities in its evaluation. It covers a wide range of models - ideal gases, thermoviscoelastic fluids, thermoelastic and thermoviscoelastic solids, plastic polycrystals, miscible and immiscible mixtures, and many others. The structure of phenomenological thermodynamics is justified by a systematic derivation from the Liouville equation, through the BBGKY-hierarchy-derived Boltzmann