

1. Record Nr.	UNINA9910254603503321
Autore	Nolting Wolfgang
Titolo	Theoretical Physics 5 : Thermodynamics / / by Wolfgang Nolting
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-47910-5
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 282 p. 87 illus.)
Disciplina	536.7
Soggetti	Thermodynamics Physics Phase transformations (Statistical physics) Mathematical Methods in Physics Phase Transitions and Multiphase Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Basic Concepts -- Laws of Thermodynamics -- Thermodynamic Potentials -- Phases, Phase Transitions -- Solutions of the Exercises.
Sommario/riassunto	This concise textbook offers a clear and comprehensive introduction to thermodynamics, one of the core components of undergraduate physics courses. It follows on naturally from the previous volumes in this series, defining macroscopic variables, such as internal energy, entropy and pressure, together with thermodynamic principles. The first part of the book introduces the laws of thermodynamics and thermodynamic potentials. More complex themes are covered in the second part of the book, which describes phases and phase transitions in depth. Ideally suited to undergraduate students with some grounding in classical mechanics, the book is enhanced throughout with learning features such as boxed inserts and chapter summaries, with key mathematical derivations highlighted to aid understanding. The text is supported by numerous worked examples and end of chapter problem sets. About the Theoretical Physics series Translated from the renowned and highly successful German editions, the eight volumes of this series cover the complete core curriculum of theoretical physics at undergraduate level. Each volume is self-contained and

provides all the material necessary for the individual course topic. Numerous problems with detailed solutions support a deeper understanding. Nolting is famous for his refined didactical style and has been referred to as the "German Feynman" in reviews.
