1. Record Nr. UNINA9910961665003321

Autore	Annamalai Kalyan
Titolo	Advanced thermodynamics engineering / / by Kalyan Annamalai, Ishwar K. Puri and Milind A. Jog
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , 2011
ISBN	0-429-19157-X 1-4398-0571-7
Edizione	[Second edition.]
Descrizione fisica	1 online resource (1134 p.)
Collana	Computational Mechanics and Applied Analysis
Classificazione	SCI024000SCI065000TEC009070
Disciplina	621.402/1
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 and index.
Nota di contenuto	Front Cover; Contents; List of Tables in Appendix A; List of Figures in Appendix B; Preface to Second Edition; Nomenclature; Thermolab Excel®-Based Software for Thermodynamic Properties, Flame Temperatures of Fuels, Conversion Units, Math Functions and Other Properties; Four Important Equations in Analysis of Thermal Systems; Chapter 1: Introduction; Chapter 2: First Law of Thermodynamics; Chapter 3: Second Law of Thermodynamics and Entropy; Chapter 4: Availability; Chapter 5: Postulatory (Gibbsian) Thermodynamics; Chapter 6: State Relationships for Real Gases and Liquids Chapter 7: Thermodynamic Properties of Pure FluidsChapter 8: Thermodynamic Properties of Mixtures; Chapter 9: Phase Equilibrium for a Mixture; Chapter 10: Stability; Chapter 11: Chemically Reacting Systems; Chapter 12: Reaction Direction and Chemical Equilibrium; Chapter 13: Availability Analysis for Reacting Systems; Chapter 14: Thermodynamics and Biological Systems; Problems; A Summary of Chapterwise Formulae; Appendix A: Tables; Appendix B: Figures; Bibliography; Back Cover
Sommario/riassunto	Advanced Thermodynamics Engineering, Second Edition is designed for readers who need to understand and apply the engineering physics of thermodynamic concepts. It employs a self-teaching format that reinforces presentation of critical concepts, mathematical relationships, and equations with concrete physical examples and explanations of applications—to help readers apply principles to their own real-world

problems.