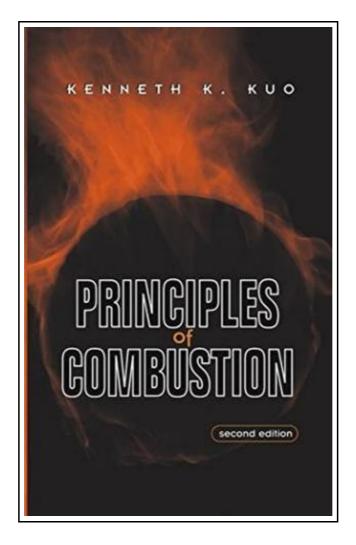
Principles of Combustion



Filesize: 2.37 MB

Reviews

This ebook is very gripping and fascinating. Sure, it is engage in, nevertheless an amazing and interesting literature. It is extremely difficult to leave it before concluding, once you begin to read the book.

(Ms. Ora Buckridge)

PRINCIPLES OF COMBUSTION



Wiley-Interscience, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Preface.Preface to the First Edition.Introduction.Importance of Combustion for Various Applications.Related Constituent Disciplines for Combustion Studies.General Method of Approach to Solving Combustion Problems.General Objectives of Combustion Modeling.Classification of Combustion Problems, General Structure of a Theoretical Model, Governing Equations for Combustion Modeling (Conservation & Transport Equations). Some Common Assumptions Made In Combustion Models. Several Basic Definitions1. Review of Chemical Thermodynamics.Nomenclatures.1. Brief Statement of Thermodynamic Laws.2. Equation of State.3. Conservation of Mass.4. The First Law of Thermodynamics; Conservation of Energy.5. The Second Law of Thermodynamics.5. 1 Equilibrium Thermodynamics.5. 2 Non-equilibrium Thermodynamics.6. Criteria for Equilibrium.7. Conservation of Atomic Species.8. Various Methods for Reactant-Fraction Specification.8.1 Mole and Mass Fractions.8.2 Fuel-Oxidant and Fuel-Air Ratios.8.3 Equivalence Ratio.8.4 Mixture Fraction.9. Standard Enthalpies of Formation.10. Thermochemical Laws.11. Relationship Between Bond Energies and Heats of Formation.12. Heats of Reaction for Constant-Pressure and Constant-Volume Combustion.12.1 Constant-Pressure Combustion.12.2 Constant-Volume Combustion.13. Energy Balance Considerations for Flame Temperature Calculations.14. Equilibrium Constants.15. Real-Gas Equations of State and Fugacity Calculation.16. More Complicated Dissociation in the Combustion of Hydrocarbons.17. The Clausius-Clapeyron Equation for Phase Equilibrium.18. Calculation of Equilibrium Compositions with NASA's CEA Computer Program.18.1 Assumptions and Capabilities.18.2 Equations Describing Chemical Equilibrium.18.2.1 Thermodynamic Equations.18.2.2 Minimization of Gibbs Free Energy.19. Other Well-Established Chemical Equilibrium Codes.References.Homework.Projects.2. Chemical Kinetics and Reaction Mechanisms. Additional Symbols. 1. Rates of Reactions and Their Functional Dependence. 1.1 Total Collision Frequency.1.2 Equation of Arrhenius.1.3 Apparent Activation Energy.1.4 Rates of Reaction.1.5 Methods for Measurement of Gas-Phase Reaction Rates.1.5.1 Static Methods.1.5.1.1 Flash Photolysis Resonance Fluorescence Technique.1.5.1.2 Relative Rate Constant Photolysis Technique.1.5.1.3 Laser Photolysis/Laser Induced Fluorescence Technique.1.5.2 Dynamic Methods for Reactions in Flow Systems.1.5.3 Several Methods for Measuring Rapid Reaction Rates.2. One-Step Chemical Reactions of Various Orders.2. 1 First-Order Reactions.2.2 Second-Order Reactions.2.3 Third-Order Reactions.3. Consecutive Reactions.4. Competitive Reactions.5. Opposing Reactions.5.1 First-Order Reaction Opposed by a First-Order Reaction.5.2 First-Order Reaction Opposed...



Read Principles of Combustion Online Download PDF Principles of Combustion

You May Also Like



Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)

HarperCollins, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Foreword by Raph Koster. Introduction. I. EXECUTIVE CONSIDERATIONS. 1. The Market. Do We Enter the Market? Basic Considerations. How...

Read ePub »



The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)

Cengage Learning, 2012. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: You can now maximize and integrate the design and development power of Adobe Creative Suite 6 with WEB...

Read ePub »



Maisy's Christmas Tree

Candlewick, 2014. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: The final scene of the gang caroling around the tree, complete with paper crowns from British Christmas crackers, is...

Read ePub »



Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep

CreateSpace Independent Publishing Platform, 2013. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: "Star Flights Bedtime Spaceship" is a charming and fun story with the purpose to help children...

Read ePub »



Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2005 Pages: 815 Publisher: the Chinese teenager Shop Books all book....

Read ePub »



Lans Plant Readers Clubhouse Level 1

Barron's Educational Series. Paperback. Book Condition: New. Paperback. 24 pages. Dimensions: 8.9in. x 5.7in. x 0.3in.This is volume six, Reading Level 1, in a comprehensive program (Levels 1 and 2) for beginning readers. Two nine-book sets





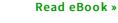
Read Write Inc. Phonics: Yellow Set 5 Storybook 3 Tom Thumb

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 210 x 148 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Read eBook »



Read Write Inc. Phonics: Pink Set 3 Storybook 5 Tab s Kitten

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 193 x 130 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read





Read Write Inc. Phonics: Green Set 1 Storybook 5 Black Hat Bob

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 209 x 113 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read

Read eBook »



Read Write Inc. Phonics: Pink Set 3 Storybook 1 Scruffy Ted

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 167 x 135 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Read eBook »