1. Record Nr. UNISALENTO991002393919707536

Autore	Montesquieu, Charles Louis : de
Titolo	De l'esprit des loix / texte établi et présenté par Jean Brethe de la Gressaye
Pubbl/distr/stampa	Paris : Les Belles lettres, 1950-1958
Descrizione fisica	3 v. ; 20 cm.
Collana	Les textes français
Altri autori (Persone)	Brethe de la Gressaye, Jean
Disciplina	320.011
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9911004748003321

Autore	Modest M. F (Michael F.)
Titolo	Radiative heat transfer / / Michael F. Modest
Pubbl/distr/stampa	New York, : Academic Press, 2013
ISBN	0-12-386990-0 1-299-20197-0
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (905 p.)
Disciplina	536.3 621.4022
Soggetti	Heat - Transmission Heat - Radiation and absorption
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; Radiative Heat Transfer; Copyright Page; About the Author; Dedication; Contents; Preface to the Third Edition; List of Symbols;

Chapter 1: Fundamentals of Thermal Radiation; 1.1 Introduction; 1.2 The Nature of Thermal Radiation; 1.3 Basic Laws of Thermal Radiation; 1.4 Emissive Power; 1.5 Solid Angles; 1.6 Radiative Intensity; 1.7 Radiative Heat Flux; 1.8 Radiation Pressure; 1.9 Visible Radiation (Luminance); 1.10 Radiative Intensity in Vacuum; 1.11 Introduction to Radiation Characteristics of Opaque Surfaces; 1.12 Introduction to Radiation Characteristics of Gases
1.13 Introduction to Radiation Characteristics of Solids and Liquids1.14 Introduction to Radiation Characteristics of Particles; 1.15 The Radiative Transfer Equation; 1.16 Outline of Radiative Transport Theory; References; Problems; Chapter 2: Radiative Property Predictions From Electromagnetic Wave Theory; 2.1 Introduction; 2.2 The Macroscopic Maxwell Equations; 2.3 Electromagnetic Wave Propagation In Unbounded Media; 2.4 Polarization; 2.5 Reflection And Transmission; 2.6 Theories For Optical Constants; References; Problems; Chapter 3: Radiative Properties of Real Surfaces; 3.1 Introduction
3.2 Definitions3.3 Predictions From Electromagnetic Wave Theory; 3.4 Radiative Properties of Metals; 3.5 Radiative Properties of Nonconductors; 3.6 Effects of Surface Roughness; 3.7 Effects of Surface Damage and Oxide Films; 3.8 Radiative Properties of Semitransparent Sheets; 3.9 Special Surfaces; 3.10 Experimental Methods; References; Problems; Chapter 4: View Factors; 4.1 Introduction; 4.2 Definition of View Factors; 4.3 Methods for the Evaluation of View Factors; 4.4 Area Integration; 4.5 Contour Integration; 4.6 View Factor Algebra; 4.7 The Crossed-strings Method
4.8 The Inside Sphere Method4.9 The Unit Sphere Method; References; Problems; Chapter 5: Radiative Exchange Between Gray, Diffuse Surfaces; 5.1 Introduction; 5.2 Radiative Exchange Between Black Surfaces; 5.3 Radiative Exchange Between Gray, Diffuse Surfaces; 5.4 Electrical Network Analogy; 5.5 Radiation Shields; 5.6 Solution Methods for the Governing Integral Equations; References; Problems; Chapter 6: Radiative Exchange Between Partially Specular Gray Surfaces; 6.1 Introduction; 6.2 Specular View Factors; 6.3 Enclosures with Partially Specular Surfaces; 6.4 Electrical Network Analogy
6.5 Radiation Shields6.6 Semitransparent Sheets (Windows); 6.7 Solution of the Governing Integral Equation; 6.8 Concluding Remarks; References; Problems; Chapter 7: Radiative Exchange Between Nonideal Surfaces; 7.1 Introduction; 7.2 Radiative Exchange Between Nongray Surfaces; 7.3 Directionally Nonideal Surfaces; 7.4 Analysis For Arbitrary Surface Characteristics; References; Problems; Chapter 8: The Monte Carlo Method for Surface Exchange; 8.1 Introduction; 8.2 Numerical Quadrature by Monte Carlo; 8.3 Heat Transfer Relations for Radiative Exchange Between Surfaces
8.4 Random Number Relations for Surface Exchange

Sommario/riassunto

The third edition of Radiative Heat Transfer describes the basic physics of radiation heat transfer. The book provides models, methodologies, and calculations essential in solving research problems in a variety of industries, including solar and nuclear energy, nanotechnology, biomedical, and environmental. Every chapter of Radiative Heat Transfer offers uncluttered nomenclature, numerous worked examples, and a large number of problems-many based on real world situations-making it ideal for classroom use as well as for self-study. The book's 24 chapters cover the four