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Autore	Balaji C.
Titolo	Essentials of Radiation Heat Transfer // by C. Balaji
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Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XV, 212 p. 111 illus.)
Disciplina	621.4022
Soggetti	Thermodynamics Heat engineering Heat transfer Mass transfer Production engineering Energy storage Engineering Thermodynamics, Heat and Mass Transfer Thermal Process Engineering Mechanical and Thermal Energy Storage
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Black body and its characteristics -- Radiative properties of non-black surfaces -- Radiation heat transfer between surfaces -- Radiation in participating media -- Introduction to atmospheric radiation -- Inverse problems in radiation -- Bibliography -- Index.
Sommario/riassunto	This book focuses only on the essential topics required to gain an understanding of radiation heat transfer to enable the reader to master more challenging problems. The strength of the book lies in its elaborate presentation of the the powerful radiosity-irradiation method and shows how this technique can be used to solve a variety of problems of radiation in enclosures made of one to any number of surfaces in both transparent and participating media. The book also introduces atmospheric radiation in which engineers can contribute to the technology of remote sensing and atmospheric sciences in general, by a better understanding of radiation. The author has included

pedagogical features such as end-of-chapter exercises and worked examples with varying degrees of difficulty to augment learning and self-testing. The book has been written in an easy- to- follow conversational style to enhance reader engagement and learning outcomes. This book will be a useful guide for upper undergraduate and graduate students in the areas of mechanical engineering, aerospace engineering, atmospheric sciences, and energy sciences.
