1. Record Nr. UNINA9910337609803321 Autore Boulos Maher I Titolo Handbook of thermal plasmas / / Maher I. Boulos, Pierre L. Fauchais, **Emil Pfender** Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-319-12183-9 Descrizione fisica 1 online resource (1500 p. 1000 illus.) Disciplina 621.4021 Soggetti Heat - Transmission Thermodynamics Heat engineering Mass transfer Surfaces (Technology) Thin films Manufactures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia From the Contents: The Plasma State -- Basic Atomic and Molecular Nota di contenuto Theory -- Kinetic Theory -- Fundamental Concepts in Gaseous Electronics -- Derivation of the Plasma Equations -- Thermodynamic Properties. Sommario/riassunto This authoritative reference integrates detail on the most-essential properties, specifications, tolerances, and related knowledge derived from theoretical and applied research and industrial development on thermal plasmas. Every aspect of thermal plasmas is thoroughly covered, including: basic atomic and molecular theory, radiation transport, thermal arcs, and inductively coupled discharges, mathematical modelling as well as plasma and in-flight particle diagnostics. Industrial applications of thermal plasma technology are

working in the field.

also included. This book is an essential, comprehensive resource for practicing engineers, research scientists, and graduate students