

1. Record Nr.	UNINA9910254356803321
Autore	Lupi Sergio
Titolo	Fundamentals of Electroheat : Electrical Technologies for Process Heating // by Sergio Lupi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-46015-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVII, 620 p. 446 illus., 18 illus. in color.)
Disciplina	621.402
Soggetti	Microwaves Optical engineering Thermodynamics Heat engineering Heat transfer Mass transfer Manufactures Optical materials Electronic materials Chemical engineering Microwaves, RF and Optical Engineering Engineering Thermodynamics, Heat and Mass Transfer Manufacturing, Machines, Tools, Processes Optical and Electronic Materials Industrial Chemistry/Chemical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Heat Transfer -- Electromagnetic fields in electro-technologies -- Arc Furnaces -- Direct Resistance Heating (DRH) -- Induction Heating -- High Frequency and Microwave Heating.
Sommario/riassunto	This book provides a comprehensive overview of the main electrical technologies for process heating, which tend to be treated separately in specialized books. Individual chapters focus on heat transfer, electromagnetic fields in electro-technologies, arc furnaces, resistance

furnaces, direct resistance heating, induction heating, and high-frequency and microwave heating. The authors highlight those topics of greatest relevance to a wide-ranging teaching program, and at the same time offer a detailed review of the main applications of the various technologies. The content represents a synthesis of the extensive knowledge and experience that the authors have accumulated while researching and teaching at the University of Padua's Engineering Faculty. This text on industrial electroheating technologies is a valuable resource not only for students of industrial, electrical, chemical, and material science engineering, but also for engineers, technicians and others involved in the application of electroheating and energy-efficient industrial processes.

---