Record Nr. UNINA9910784930203321 Infrared heating for food and agricultural processing / / editors, **Titolo** Zhongli Pan and Griffiths Gregory Atungulu Pubbl/distr/stampa Boca Raton:,: Taylor & Francis,, 2010 **ISBN** 1-4398-5857-8 0-429-15087-3 1-4200-9099-2 Descrizione fisica 1 online resource (302 p.) Collana Contemporary food engineering series Altri autori (Persone) PanZhongli AtunguluGriffiths Gregory Disciplina 664/.0288 Soggetti Radiation preservation of food Infrared heating Agricultural processing Farm produce - Radiation preservation Infrared radiation - Industrial applications Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali A CRC title. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover; Contents; Series Preface; Series Editor; Preface; Editors; Contributors; Chapter 1: Fundamentals and Theory of Infrared Radiation; Chapter 2: Infrared Radiative Properties of Food Materials; Chapter 3: Heat and Mass Transfer Modeling of Infrared Radiation for Heating; Chapter 4: Emitters and Infrared Heating System Design; Chapter 5: Infrared Drying; Chapter 6: Combined Infrared and Hot Air Drying; Chapter 7: Combined Infrared Radiation and Freeze-Drying; Chapter 8: Vacuum Infrared Drying; Chapter 9: Infrared Dry Blanching; Chapter 10: Infrared Baking and Roasting Chapter 11: Infrared Radiation Heating for Food Safety ImprovementChapter 12: Industrial Applications of Infrared Radiation Heating and Economic Benefits in Food and Agricultural Processing: Index: Back cover Sommario/riassunto It's been nearly 40 years since the last book on infrared heating for food processing was published, and in the meantime, the field has seen

significant progress in understanding the mechanism of the infrared

(IR) heating of food products and interactions between IR radiation and food components. Infrared Heating for Food and Agricultural Processing presents the latest applications of IR heating technology, focusing on thermal processing of food and agricultural products. Coverage Ranges from Fundamentals to Economic Benefits With an