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Sommario/riassunto

The challenge of maintaining both quality and safety in the thermal processing of foods results from the degradation of heat-sensitive quality attributes during processing. The editor of Thermal Food Processing: New Technologies and Quality Issues presents a comprehensive reference through authors that assist in meeting this challenge by explaining the latest developments and analyzing the latest trends in thermal food processing research and development. The book is divided into three parts for easy reference. Part I, Modeling of Thermal Food Processes, discusses the thermal physical properties of foods, recent developments in heat and mass transfer, innovative modeling techniques including artificial neural network modeling, and computational fuel dynamics. Part II, Quality and Safety of Thermally Processed Food, provides the latest research and development information used to maintain high quality and safety standards for certain types of food products including thermally processed meat, poultry, fishery products, dairy products, canned foods, and vegetables. Part III, Innovations in Thermal Food Processes, details existing, alternative thermal processing technologies, outlining their potential, future application in the food industry. These innovations include the ohmic heating technique, radio frequency energies, infrared rays, the combination of pressure and pH with thermal processing, and time-temperature integrators used in evaluating and controlling thermal processes--