

1. Record Nr.	UNINA9910734856303321
Autore	Mukhopadhyay Mamata
Titolo	Sterilization and Preservation : Applications of Supercritical Carbon Dioxide // by Mamata Mukhopadhyay, Anuradha Chatterjee
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-17370-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (213 pages)
Disciplina	905 664.0286
Soggetti	Food—Analysis Chemistry Biomaterials Environmental chemistry Food Chemistry Environmental Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction to Sterilization and Preservation Using Supercritical CO -- Classification of Foods, Biomaterials, and Microorganisms -- Characterization Methods and Evaluation of Sterility -- Conventional Processes of Sterilization and Preservation -- Processing with Supercritical Carbon Dioxide -- Sterilization and Preservation of Solid Foods with Supercritical CO -- Sterilization and Preservation of Liquid Foods with Supercritical CO.
Sommario/riassunto	This book is intended to be used as a graduate textbook for students pursuing courses in food safety and technology, and food process engineering. It is a useful supplementary resource in sterilization of biomaterials and biomedical devices, and management of biological and biomedical wastes. It covers the fundamentals of sterilization and preservation. It further discusses the classification of foods, biomaterials, and microorganisms. The contents also present the supercritical carbon dioxide (SC CO) technology as one of the emerging technologies, which has great potential in the food and

pharmaceutical industries. It discusses the SC CO technology, its advantages over the prevalent methods for sterilization and stabilization, the processing techniques and selection of process parameters, and the effectiveness of the use of this technology for the aforementioned objectives. It also contains a few case studies. It is a useful textbook for students aspiring for specialized courses in the disciplines of food processing and preservation.
