1. Record Nr. UNINA9910566470703321

Autore	Maier Dirk E
Titolo	Recent Innovations in Post-harvest Preservation and Protection of Agricultural Products
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 electronic resource (196 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The global food supply chain relies on engineered systems, operational practices, and logistics to preserve, protect, process, and deliver agricultural crops along complex supply lines from farmers in low-, middle-, and high-income countries to markets around the world. Food and nutrition security is compromised by post-harvest losses (and food waste) that have been estimated to be as high as 20% in durable and 40% in perishable crops. Preserving crops using technologies and practices such as timely harvesting, evaporative cooling, cold and frozen storage, drying, and dehydrating, and protecting crops using technologies and practices such as damage-less handling, controlled and modified atmosphere storage, non-chemical heat and gas treatment, plant-derived protective films for individual fruits and vegetables, and improved packaging containers are critical to preserving nutrients, improving livelihoods, and realizing an efficient food system. This Special Issue aims to cover recent progress and innovations in science, technology, engineering, operational practices, and logistics related to post-harvest preservation and protection of durable and perishable agricultural crops. It seeks contributions that improve effectiveness, efficiency, reliability and sustainability in post-harvest handling of crops from field to end use that preserve product quality and result in foods and feeds which are nutritious and safe for human and animal consumption.

2. Record Nr. UNINA9910367747603321

Autore	Adams II Thomas A
Titolo	Modeling and Simulation of Energy Systems
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019
ISBN	3-03921-519-1
Descrizione fisica	1 electronic resource (496 p.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Energy Systems Engineering is one of the most exciting and fastest growing fields in engineering. Modeling and simulation plays a key role in Energy Systems Engineering because it is the primary basis on which energy system design, control, optimization, and analysis are based. This book contains a specially curated collection of recent research articles on the modeling and simulation of energy systems written by top experts around the world from universities and research labs, such as Massachusetts Institute of Technology, Yale University, Norwegian University of Science and Technology, National Energy Technology Laboratory of the US Department of Energy, University of Technology Sydney, McMaster University, Queens University, Purdue University, the University of Connecticut, Technical University of Denmark, the University of Toronto, Technische Universität Berlin, Texas A&M, the University of Pennsylvania, and many more. The key research themes covered include energy systems design, control systems, flexible operations, operational strategies, and systems analysis. The addressed areas of application include electric power generation, refrigeration cycles, natural gas liquefaction, shale gas treatment, concentrated solar power, waste-to-energy systems, micro-gas turbines, carbon dioxide capture systems, energy storage, petroleum refinery unit operations, Brayton cycles, to name but a few.