

1. Record Nr.	UNINA9910566473303321
Autore	Tsantili Eleni
Titolo	Postharvest Management of Fruits and Vegetables
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 electronic resource (268 p.)
Soggetti	Research & information: general Biology, life sciences Technology, engineering, agriculture
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	All articles in the presented collection are high-quality examples of both basic and applied research. The publications collectively refer to apples, bananas, cherries, kiwi fruit, mango, grapes, green bean pods, pomegranates, sweet pepper, sweet potato tubers and tomato and are aimed at improving the postharvest quality and storage extension of fresh produce. The experimental works include the following postharvest treatments: 1-methylcyclopropene, methyl jasmonate, immersion in edible coatings (aloe, chitosan, plant extracts, nanoemulsions, ethanol, ascorbic acid and essential oils solutions), heat treatments, packaging, innovative packaging materials, low temperature, low O ₂ and high CO ₂ modified atmosphere, and non-destructible technique development to measure soluble solids with infra- and near infra-red spectroscopy. Preharvest treatments were also included, such as chitosan application, fruit kept on the vine, and cultivation under far-red light. Quality assessment was dependent on species, treatment and storage conditions in each case and included evaluation of color, bruising, water loss, organoleptic estimation and texture changes in addition to changes in the concentrations of sugars, organic acids, amino acids, fatty acids, carotenoids, tocopherols, phytosterols, phenolic compounds and aroma volatiles. Gene transcription related to ethylene biosynthesis, modification of cell wall

components, synthesis of aroma compounds and lipid metabolism were also the focus of some of the articles.
