Record Nr. UNINA9910557518203321 Autore Chen Jen-Tsung Titolo Cell Signaling in Model Plants Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, 2021 1 electronic resource (278 p.) Descrizione fisica Soggetti Research & information: general Biology, life sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Sommario/riassunto This book provides new and in-depth insights into molecular aspects of plant cell signaling in response to biotic, such as aphid- and grey mold disease-resistance, and abiotic stresses, such as soil salinity and drought stress, and additionally, functional analysis on signaling components involved in flowering, juvenility, GA signaling, and biosynthesis, and miRNA-regulated gene expression. Furthermore, plant acclimation was reported, with emphasis on mechanistic insights into the roles of brassinosteroids, cyclic AMP, and hydrogen sulfide, and the recent advances of transmembrane receptor-like kinases were refined. Clearly, plant cell signaling is an intensive topic and whether it is now or in the future, the emerging technology in functional analysis such as genome editing technologies, high-throughput technologies, integrative multiple-omics as well as bioinformatics can assist researchers to reveal novel aspects of the regulatory mechanisms of plant growth and development, and acclimation to environmental and

biotic stresses. The achievement of such research will be useful in improving crop stress tolerances to increase agricultural productivity

and sustainability for the food supply of the world.