

Special Issue

Cell Signaling in Model Plants

Message from the Guest Editors

Plants as sessile organisms are not able to move and must respond to adverse environmental conditions/stress such as high salinity, heat, cold, drought, oxidative stress, and pathogen attack. Signal transduction is a complex network of interactions that signal elements (physical and chemical) are transmitted through the plant cell to respond to environmental stimuli. Receptors, protein kinases, transcription factors, intracellular calcium, ROS, and hormones are the main components of signal transduction pathway that regulate or stimulate other cell signal components. This Special Issue explores the role of signaling components in model plants, such as *Antirrhinum*, *Arabidopsis thaliana*, *Lotus japonicas*, *Medicago truncatula*, rice, tobacco, and *Zea mays*, which have led to adaptation and resistance against abiotic and biotic stresses, including but not limited to functional analysis of key genes, hormone contents, signal transduction networks, gene expression profiling, and post-translation modifications.

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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