

Special Issue

New Perspectives on the Plant Cell Wall

Message from the Guest Editor

Cell walls are crucial for a wide range of biological processes in plants, including the regulation of growth and development, creating resilient and adaptable structures, stomatal dynamics, and pathogen and pest resistance to name just a few. They are amongst the first materials used by humans and are an important source of biopolymers and biofuels in the twenty-first century. They are complex mechanical systems in which their physical behavior is controlled by wall chemistry and biochemistry to fulfill the biomechanical, physiological, and ecological requirements of the organism. A thorough understanding of the intersections between the scientific fields of biology, chemistry, and physics in plant cell walls will contribute to our knowledge of the biological processes dependent on the wall, and help us to improve and expand the applications of cell-wall-based biomaterials. This Special Issue seeks to explore how plant-cell-wall chemistry, composition, and biochemistry influence cell wall properties, how living organisms control cell wall behavior, and how we might use this information in relation to biomaterial development.

Guest Editor

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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