

Special Issue

Molecular Insight into Oxidative Stress in Plants

Message from the Guest Editors

Under normal conditions, reactive oxygen species (ROS), such as superoxide radicals, singlet oxygen, hydrogen peroxide, and hydroxyl radicals, act as signaling molecules (oxidative signaling) in the regulation of physiological processes in plants. As a result of primary stresses, ROS can be overproduced and accumulated in plant cells, tissues and organs. This stress can have a destructive effect on many macromolecules within cells, including the oxidation of proteins, lipids, and nucleic acids, and can damage the structure and function of cell membranes and organelles.

The goal of this Special Issue is to provide a deeper insight into the molecular response of plants facing SOS. Plant survival and tolerance strategies require changes in physiological, biochemical and molecular mechanisms of cellular metabolism. Application of OMICS studies like transcriptomics, metabolomics and proteomics can provide information on overexpression of antioxidant enzymes and levels of small-molecule antioxidants.

Guest Editors

Dr. Agnieszka Hanaka

Department of Plant Physiology and Biophysics, Institute of Biological Sciences, Faculty of Biology and Biotechnology, Maria Curie-Skłodowska University, Akademicka 19, 20-033 Lublin, Poland

Dr. Sylwia Zielińska

Department of Pharmaceutical Biotechnology, Faculty of Pharmacy, Wrocław Medical University, Borowska 211, 50-556 Wrocław, Poland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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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Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle
Marche, Via Ranieri 65, 60100 Ancona, Italy

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