

Special Issue

Metabolic Networks and Signaling by ROS, RNS and RSS in Higher Plants

Message from the Guest Editors

Higher plants are essential for life on Earth. Accumulating data indicate that the metabolism of reactive oxygen, nitrogen, and sulfur species (ROS, RNS and RSS, respectively) have a significant impact in all processes in higher plants. The mechanism of action of these reactive species is basically through posttranslational modifications (PTMs) of proteins such as carbonylation, *S*-nitrosation, nitration, or persulfidation, affecting the redox status and function of the target proteins. Thus, H₂O₂, NO, and H₂S mediate several signaling networks which interact with each other, but they are also key regulatory elements in the biochemistry and physiology of plants. The present Special Issue of *Antioxidants* has the aim to provide the most current findings on the function of these families of reactive species in higher plants, and it is open to different types of manuscripts, including original research papers, perspectives, or reviews where either H₂O₂, NO, H₂S, or related molecules could be involved at biochemical or physiological levels.

Guest Editors

Prof. Dr. Francisco J. Corpas

Prof. Dr. José M. Palma

Dr. Marta Rodríguez-Ruiz

Deadline for manuscript submissions

closed (10 June 2022)



Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



mdpi.com/si/55648

Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

[mdpi.com/journal/
antioxidants](https://mdpi.com/journal/antioxidants)





Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



[mdpi.com/journal/
antioxidants](https://mdpi.com/journal/antioxidants)



About the Journal

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of “oxidative stress” a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

Editor-in-Chief

Prof. Dr. Alessandra Napolitano

Department of Chemical Sciences, University of Naples “Federico II”,
Via Cintia 4, I-80126 Naples, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)