

Special Issue

Zinc and Oxidative Stress

Message from the Guest Editor

Zinc is an important mineral supplement and has been recently recommended for patients infected with COVID-19 as a booster of the immune response. Zinc can be found in the active site of many enzymes and is also a major component of one class of transcription factors; however, zinc may target and inactivate the enzymes and proteins that contain redox active cysteine or selenocysteine residues. Such enzymes and proteins are involved in the antioxidant defense; hence, free zinc may exacerbate the oxidative damage to the cell. Whether zinc released from metallothioneins during oxidative stress can directly trigger the antioxidant program executed by Nrf2 - remains an open question. The molecular mechanisms behind the panoply of zinc effects still await their resolution. For this Special Issue, we invite researchers to provide original research articles that report on the mechanism of zinc interaction with various cellular targets, such as individual proteins and organelles, and its potential for the treatment of conditions linked to oxidative stress. The interplay between calcium/zinc and iron/zinc in various scenarios of oxidative damage is of particular interest.

Guest Editor

Prof. Dr. Irina G. Gazaryan

Department of Chemistry and Physical Sciences, Dyson College of Art and Sciences, Pace University, 861 Bedford Road, Pleasantville, NY 10570, USA

Deadline for manuscript submissions

closed (30 April 2023)



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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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

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