



an Open Access Journal by MDPI

Redox Language of the Cell

Guest Editors:

Prof. Dr. Joris Messens

Brussels Center for Redox
Biology, VIB-VUB Center for
Structural Biology, Vrije
Universiteit Brussel, Brussels,
Belgium

Dr. Daria Ezeriņa

Brussels Center for Redox
Biology, VIB Center for Structural
Biology, Vrije Universiteit Brussel,
Brussels, Belgium

Dr. Jesalyn Bolduc

Brussels Center for Redox
Biology, VIB Center for Structural
Biology, Vrije Universiteit Brussel,
Brussels, Belgium

Deadline for manuscript
submissions:

closed (31 March 2021)

Message from the Guest Editors

Every language has an alphabet, and the redox language of the cell is no exception. The letters of this alphabet are oxidants and reductants. The mitochondria, endoplasmic reticulum, and lysosomes use the alphabet to form and exchange messages that control proteostasis processes. The nucleus also speaks this language, and adapts transcription to translate the received messages to cellular responses. Redox miscommunication, on the other hand, has been shown to be involved in several pathological processes. Further elucidation of the oxidative and reductive “letters” of the redox alphabet, their intracellular metabolism, trafficking, and the proteins involved in their signaling will open new chapters in the development of redox therapeutics for human diseases. This Special Issue aims to highlight the recent developments in methodological tools and reagents that enable us to monitor cellular redox events, including their contribution to the exciting conceptual advances in our understanding of the cellular redox lexicon and the regulation by oxidative and reductive processes of cell biology, physiological processes, life span, and disease pathogenesis.



mdpi.com/si/41758

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Napolitano

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

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.

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)

Contact Us

Antioxidants Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/antioxidants
antioxidants@mdpi.com
[X@antioxidants_OA](https://twitter.com/antioxidants_OA)