

Special Issue

Protein Oxidative Modification in Brain function, Brain Ageing and Neurological Diseases

Message from the Guest Editors

Redox signalling plays an important role in the homeostatic control of several molecular pathways and in cell function, particularly changes in the redox status of Cysteine and other amino acid residues of proteins, which are extremely susceptible to reversible and irreversible oxidation by RONS. These changes can lead to redox-post-translational modifications (redox-PTMs) in proteins, which can directly affect protein structure, activity and function, ultimately impacting a multitude of biological functions. Mitochondrial dysfunction and excessive RONS levels can give rise to oxidative and nitrosative stresses, and aberrant redox-PTMs.

Oxidative and nitrosative stresses and aberrant redox-PTMs are well-established contributors to a plethora of diseases, however, the underlying mechanisms are not fully understood. In this Special Issue, we invite original research articles and review articles related to the roles of the redox-PTMs-mediated signalling in modulating protein structure and activity, and brain function in health, ageing and neurological conditions.

Guest Editors

Dr. Matt  a J. Finelli

Biodiscovery Institute, University Park, Nottingham NG7 2RD, UK

Dr. Andreia N. Carvalho

Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, 1649-003 Lisboa, Portugal

Deadline for manuscript submissions

closed (31 October 2024)



Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



mdpi.com/si/142480

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)