

Special Issue

Advances in Oxidative Stress and Eye Diseases

Message from the Guest Editors

Reactive oxygen species (ROS) are important signaling molecules that regulate numerous physiological actions, such as neuron function and vascular reactivity.

However, excessive ROS levels can modify cellular molecules and impair their function. Moreover, ROS can stimulate the production of inflammatory cytokines, causing inflammation and cell death. Hence, it is not surprising that elevated ROS levels have been observed in various ocular diseases, such as glaucoma, diabetic retinopathy, and age-related macular degeneration (AMD), but also in ocular surface diseases. Different compounds with direct or indirect antioxidant activity have been used to reduce ROS accumulation in animal ocular disease models and humans. We invite submissions that cover the following topics to this Special Issue: Studies that provide substantial mechanistic insight into the pathophysiology of ROS in eye diseases in animal models or patients. Proof-of-concept studies for certain antioxidant agents demonstrating their influence on oxidative stress and ocular disease onset and/or progression. The studies should employ accepted state-of-the-art techniques to assess oxidative stress and/or inflammation.

Guest Editors

Dr. Adrian Gericke

Augenklinik, Universitätsmedizin der Johannes Gutenberg-Universität Mainz, Langenbeckstraße 1, 55131 Mainz, Germany

Dr. Verena Prokosch

Department of Ophthalmology, University of Cologne, Kerpener Str. 62, 50937 Köln, Germany

Deadline for manuscript submissions

closed (30 December 2021)



Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.0
CiteScore 10.6
Indexed in PubMed



mdpi.com/si/85288

Antioxidants

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 6.0
CiteScore 10.6
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, CAPIus / SciFinder, and other databases.

Journal Rank:

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