

Special Issue

Carotenoids: Biological Properties, and Function in Human Health

Message from the Guest Editors

Carotenoids are present in plant pigments and in both photosynthetic and non-photosynthetic organisms. They have valuable biological properties, among which the most documented is the activity of the provitamin A. Due to the presence in the molecule of a number of double bonds, carotenoids readily react with electrophiles. Carotenoids are classified as both prevention and intervention antioxidants—they may inactivate free radicals by forming adducts with them or electron transfer. Scientific evidence has strongly shown that regular intake of dietary carotenoids reduces the risk of oxidative stress and civilization diseases. In the human body, they perform many important functions, since they prevent atherosclerosis, are involved in maintaining the immune function, maintain the health of the eyes and skin, and reduce the risk of macular degeneration, cataract, cancer, and diseases of the cardiovascular system. This Special Issue is dedicated to original research articles and review articles which cover the latest findings on the biological properties of carotenoids, their function in human health, and methods for their determination.

Guest Editors

Dr. Agnieszka Nawirska-Olszańska

Department of Fruit, Vegetable and Plant Nutraceutical Technology, Wrocław University of Environmental and Life Sciences, C. K. Norwida str. 25, 50-375 Wrocław, Poland

Dr. Joanna Kolniak-Ostek

Department of Fruit, Vegetable and Plant Nutraceutical Technology, The Faculty of Biotechnology and Food Sciences, Wrocław University of Environmental and Life Sciences, Chelmonskiego 37, 51-630 Wrocław, Poland

Deadline for manuscript submissions

closed (30 April 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/61151

Applied Sciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

mdpi.com/journal/

[appls](https://appls.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



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



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, 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), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)