Special Issue

Biomarkers of Oxidative and Radical Stress

Message from the Guest Editor

Reactive oxygen, nitrogen, and sulfur species, including free radicals, are generated in the biological environment as a result of normal intracellular metabolism and function as physiological signaling species that participate in the modulation of apoptosis, stress responses, and proliferation. Some of these reactive species can damage organs, tissues, and cells by oxidizing DNA, proteins, and lipids, thereby resulting in diseases. The enormous importance of oxidative and free-radical chemistry for a variety of biological events, including ageing and inflammation, has motivated studies to understand the related mechanistic steps at the molecular level with the development of related biomarkers.

This Special Issue covers various aspects of biomarker research: from biomarker identification, including chemical reactivity and analytical procedures, to biomarker validation and pre-clinical applications. Examples include DNA oxidation products, peptide and protein modifications, lipid peroxidation and isomerization, and defense and repair strategies. Research articles and reviews related to these topics are welcome.

Guest Editor

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

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