

Special Issue

Molecular, Cellular Mechanism of Oxidative Stress in Physiological and Pathophysiological Conditions

Message from the Guest Editor

Living organisms are constantly exposed to various environmental and biological stressors, including infection, inflammation, and chronic and civilization diseases. Oxidative stress and a diminished content of endogenous antioxidants in the body increase the vulnerability of tissues and cellular components to reactive oxygen species. The balance between antioxidant and prooxidant compounds at a molecular and cellular level represents a crucial determinant of various physiological processes. The maintenance of this balance is the primary aim of the integrated antioxidant system constructed within the living body. Under stress conditions, the antioxidant defense comprises the cumulative activity of enzymatic and non-enzymatic antioxidant systems. Understanding the physiological processes behind oxidative stress in pathophysiological conditions may facilitate the identification of individuals at risk of poor health or adverse welfare outcomes. This Special Issue aims to collect original articles and systematic reviews addressing various aspects of the modulation of oxidative stress in living organisms.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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