

Special Issue

Multifunctional Antioxidants and Enzyme Inhibitors: Design, Synthesis and Mechanisms of Actions

Message from the Guest Editor

Antioxidants are essential compounds that protect cells from oxidative damage caused by free radicals and reactive oxygen species. They play a significant role in slowing the aging process and reducing the risk of chronic diseases. Antioxidants are also widely used in other applications such as food preservation, cosmetics, and pharmaceuticals. To ensure their successful use across multiple fields, it is crucial to develop antioxidants that maintain their effectiveness while remaining safe. This Special Issue invites submissions on the innovative design and synthesis of next-generation antioxidants that exhibit strong activity with minimal pro-oxidant effects. Potential topics include phenolic, thiolic, or nitrogen-based free radical scavengers, inhibitors of oxidant-generating enzymes, activators of antioxidant-generating enzymes, metal chelators, and multifunctional antioxidants, all of which should undergo rigorous testing for efficacy. We also welcome research on antioxidant mechanisms, testing in cell lines and animal models, and the exploration of new methods to enhance the water solubility of hydrophobic antioxidants.

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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