

## Special Issue

# Radiation and Photochemical Modifications in Proteins: Mechanistic Aspects and Applications

### Message from the Guest Editors

Proteins are highly abundant cellular biomolecules and therefore are a major target when biological systems are irradiated or illuminated. Radiation- and photo-induced modifications in proteins are associated with changes in their structure and functions. Radiolysis (the initiation of reactions by high-energy radiation) and photolysis (the initiations of reactions by UV and visible light) were found as very valuable and powerful chemical tools for inducing and studying radical processes that are of particular interest in biology and life sciences. The use of the methods of radiolysis and photolysis has provided a wealth of data, especially about the kinetics of the oxidation by various free radicals and their mechanisms, the identification of transients formed, their lifetimes and the possibility to repair them by the so-called antioxidants.

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### Deadline for manuscript submissions

closed (30 June 2022)



## International Journal of Molecular Sciences

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CiteScore 9.0  
Indexed in PubMed



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*International Journal of  
Molecular Sciences*  
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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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