

Special Issue

Bioluminescent and Fluorescent Proteins: Molecular Mechanisms and Modern Applications

Message from the Guest Editor

Bioluminescence, a natural phenomenon of visible light emission by living organisms, has been found in numerous terrestrial and marine organisms. Both the substrates and cofactors involved in bioluminescence reactions as well as the enzymes catalyzing these reactions have turned out to be peculiar. In addition to luciferases, many bioluminescence systems contain “antenna” proteins, such as Green fluorescent protein (GFP), which e.g., modulate the bioluminescence color by means of energy transfer. This Special Issue of the International Journal of Molecular Science is devoted to experimental and theoretical studies on functioning mechanisms of bioluminescent proteins from various organisms, the proteins involved in bioluminescence (the lumazine protein, GFP and GFP-like proteins, and the enzymes participating in the synthesis of substrates), novel assays with the use of these proteins, and applications of these proteins in experimental biology and medicine. We invite authors to present their latest research in related fields.

Guest Editor

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Deadline for manuscript submissions

closed (20 December 2020)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/41359

*International Journal of
Molecular Sciences*
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Message from the Editor-in-Chief

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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