

Special Issue

New Molecular Insights into Antimicrobial Photo-Treatments

Message from the Guest Editor

We invite investigators who are active in the field to submit original research papers as well as review articles to this Special Issue, to highlight the realization and the use of molecular and nano-systems for antimicrobial photo-treatments, to provide new insights into the fundamental mechanisms of microbial photo-inactivation or to propose stimulating ideas and novel applications to expand the use of the methodology. Scientific contributions are expected to provide molecular-level information about the systems and/or the processes under study. The issue will focus on, but will not be limited to, the following aspects:

- Fundamental mechanisms of PDI, PTT or UV light-based antimicrobial treatments;
- New photo-activated materials, including molecules and nanomaterials;
- New formulations of existing photo-activated agents;
- Targeted photo-treatments against bacteria and viruses;
- Photo-treatments exploiting endogenous molecules;
- Visualization of functional photo-activated agents in situ with advanced microscopy;
- Combination treatments with, e.g., antibiotics or antibodies;
- Photo-activated molecular systems for industrial and large-scale applications.

Guest Editor

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Deadline for manuscript submissions

closed (20 October 2025)



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Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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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