

Special Issue

Oligonucleotides Application to Nano- and Biotechnology (DNA Origami, DNA Machine)

Message from the Guest Editors

Progress in organic synthesis, molecular biology, and nanotechnology has made nucleic acids leading elements in numerous applications. For instance, DNA oligonucleotides are the fundamental building elements for the construction of DNA origamis, nanodevices, and nanomachines. Oligonucleotides are also essential in the development of the antisense therapy strategy and other related gene silencing methods. Conjugation of oligonucleotides to other biopolymers and/or chemical entities, such as cell penetrating peptides or metal complexes is a highly developing field of research. Lastly, the advent of SELEX has made aptamers and DNAzymes popular tools for biosensing and therapeutic applications and the inclusion of modified triphosphates broadens the scope of these functional nucleic acids. Therefore, in this Special Issue on oligonucleotides, we welcome research articles and comprehensive reviews in all mentioned areas. Prof. Dr. Shigeki Sasaki
Dr. Marcel Hollenstein

Guest Editors

Prof. Dr. Shigeki Sasaki

Graduate School of Pharmaceutical Sciences, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan

Dr. Marcel Hollenstein

Laboratory for Bioorganic Chemistry of Nucleic Acids, Department of Structural Biology and Chemistry, Institut Pasteur, CNRS UMR3523, 28, rue du Docteur Roux, 75724 Paris Cedex 15, France

Deadline for manuscript submissions

closed (31 October 2018)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/12943

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

[mdpi.com/journal/
molecules](https://mdpi.com/journal/molecules)





Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



[mdpi.com/journal/
molecules](https://mdpi.com/journal/molecules)



About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).