

Special Issue

Protein-DNA Interactions: From Biophysics to Genomics

Message from the Guest Editor

Protein-DNA interactions are vital for gene regulation, replication, and repair. These essential cellular processes result from a complex action of systems involving various proteins such as transcription factors and DNA repair/modifying enzymes. Many mechanistic aspects of these proteins should be delineated to understand how genes are regulated and maintained. Such knowledge is important, particularly because many human diseases are related to abnormalities in protein-DNA interactions. Adverse effects may be caused by mutations in the genes and cis-regulatory elements, by alteration in post-translational modifications of transcription factors and DNA repair/modifying enzymes, and by epigenetic modifications of DNA and histones. In many cases, these are related to each other in complex networks of molecular interplays. This special issue is intended for providing a forum to discuss protein-DNA interactions from broader perspectives, ranging from an atomic/molecular level to a cellular/organismic level. Review articles by experts in the field are particularly welcomed.

Guest Editor

Prof. Dr. Junji Iwahara

Department of Biochemistry and Molecular Biology, Sealy Center for Structural Biology and Molecular Biophysics, University of Texas Medical Branch, Galveston, Texas, United States

Deadline for manuscript submissions

closed (31 December 2018)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 10.3
Indexed in PubMed



mdpi.com/si/13156

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 10.3
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 molecular chemistry, now in its 30th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of 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 15.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).