Special Issue

Chemical Composition and Anti-Inflammatory Activity of Essential Oils

Message from the Guest Editor

The plant kingdom is the main source of chemical diversity from which thousands of organic compounds are produced, including the components of essential oils. The isolation and the chemical characterization of essential oils from plant species remains a fascinating challenge for natural product researchers. The present Special Issue will mainly address, but not exclusively, the more recent results concerning new applications related to the anti-inflammatory activity of essential oils and the investigation of the mechanism of action of the whole complex mixture, as well as of the pure components both at post-transcriptional and posttranslational levels. A clarification of the well-known synergistic paradigm, i.e., the entire essential oil being more effective than its pure main components, is strongly welcome.

Guest Editor

Dr. Gianfranco Fontana

Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, Università degli Studi di Palermo, I-90128 Palermo, Italy

Deadline for manuscript submissions

closed (31 October 2025)



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/200930

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

mdpi.com/journal/molecules





Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th 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 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).

