Special Issue

Photothermal Agents in Therapy

Message from the Guest Editors

Thermal treatments are based on driving the normal temperature of the body (or part of it) at higher values in a controlled manner. Controlled temperature increments have a positive effect on patients with an ongoing disease, such as cancer. Thermal treatments include two techniques, namely hyperthermia and thermal ablation. The difference between these is the threshold of temperature: in hyperthermia, the temperature rises to 42 oC, while in thermal ablation, the temperature exceeds 42 oC. Thermal ablation is the basis of photothermal therapy (PTT). For this therapy, it is necessary to induce a temperature increase in the tumor, while keeping the temperature of the surrounding tissue at a normal level. To increase the efficacy and selectivity of photothermal ablation, it is necessary to introduce substances into the tumor to convert the absorbed the light into heat. Such substances are called photothermal agents (PA). To date, a vast array of nanoparticles capable of efficient heat generation under illumination with laser radiation have been developed.

Guest Editors

Prof. Dr. Joan Estelrich

Department of Pharmacy, Pharmaceutical Technology and Physical Chemistry, Faculty of Pharmacy and Food Sciences, University of Barcelona, Avda. Joan XXIII, 27-31, 08028 Barcelona, Spain

Dr. Maria Antònia Busquets

Department of Pharmacy, Pharmaceutical Technology and Physical Chemistry, Faculty of Pharmacy and Food Sciences, University of Barcelona, Avda. Joan XXIII, 27-31, 08028 Barcelona, Spain

Deadline for manuscript submissions

closed (30 April 2019)

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/13121

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

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).

MDPI