Topical Collection

Applied Physics in Cancer Cells

Message from the Collection Editors

This Special Issue will focus on the state-of-the-art of applied-physics-related methodologies for investigating the behavior of cancerous cells and tissue, their measurement and characterization representing a thrilling challenge to researchers in the field.

Topics of interest might cover the characterization of cell electrical properties, mechanical, proliferation, and adhesive properties, the influence of applied magnetic fields, utilization of (nano)particles of diverse nature (i.e., magnetic), reporting of advances in ultrastructure determination, as well as surface properties, among others. These features can also be approached from a materials science or a diagnosis tool perspective, in order to discriminate between healthy and cancer cells. Submission is open to studies with very diverse experimental techniques (optical/fluorescence microscopy, quartz crystal microbalance, electrical impedance spectroscopy, Raman/FTIR/microwave spectroscopy, reflection interference contrast microscopy, etc.), although the use of scanning probe microscopy is particularly appreciated.

Collection Editors

Dr. Jagoba Iturri

Department of Nanobiotechnology (DNBT), Institute for Biophysics, BOKU University for Natural Resources and Life Sciences, Muthgasse 11 (Simon Zeisel Haus), A-1190 Vienna, Austria

Prof. Dr. José Luis Toca-Herrera

Department of Nanobiotechnology (DNBT), Institute for Biophysics, BOKU University for Natural Resources and Life Sciences, Muthgasse 11 (Simon Zeisel Haus), A-1190 Vienna, Austria

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/si/59550

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

mdpi.com/journal/biology

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/journal/biology

About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne
Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya
Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

MDPI