







an Open Access Journal by MDPI

# Advanced Biomaterials for Early Detection, Drug Delivery, Treatment and Prognosis in Cancer

Guest Editors:

## Dr. Tanmay Kulkarni

Assistant Professor, Department of Biochemistry and Molecular Biology at Mayo Clinic Florida, Jacksonville, FL, USA

#### Dr. Krishnendu Pal

Assistant Professor, Department of Biochemistry and Molecular Biology at Mayo Clinic Florida, Jacksonville, FL, USA

Deadline for manuscript submissions:

10 October 2024

# **Message from the Guest Editors**

Cancer remains one of the most difficult pathologies to treat owing to dense stroma. late detection, and resistance to drugs. The drawbacks of conventional drug delivery include nonspecific targeting, toxicity, reduced efficacy, and a low therapeutic index. Moreover, the lack of realtime prognosis often results in under- or overtreatment, ultimately leading to drug resistance or toxicity, respectively. This Special Issue aims to encourage the design and testing of advanced biomaterials for early detection, drug delivery, treatment, and prognosis that will overcome the limitations of conventional drug therapy. While the focus is on the synthesis therapeutic/therapostic evaluation of these advanced biomaterials, this multidisciplinary field is extended to incorporate nano- and macroscale biophysical attributes of advanced biomaterials and their interaction with biological components both in vitro and in vivo. Manuscripts with a scientifically sound approach backed mechanistic insights with into implications/translational effects are highly encouraged. Review articles covering the present state-of-the-art technologies are also welcomed.













an Open Access Journal by MDPI

# **Editor-in-Chief**

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, OC H3A 0C7, Canada

# **Message from the Editor-in-Chief**

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials. materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

#### **Contact Us**