Special Issue

Organic Nanoparticles for Imaging and Cancer Therapy

Message from the Guest Editor

Organic nanoparticles have become a research hotspot in the field of imaging and cancer therapy because of their unique physicochemical properties. They are usually composed of biocompatible organic materials, such as polymers, oligomers, small molecular dyes, etc. Organic nanoparticles can be used as contrast agents to participate in multimodal imaging, improve image quality, and achieve a more accurate disease diagnosis. In cancer treatment, they can not only serve as drug carriers to facilitate the directional transport of chemotherapeutic drugs to tumor sites but can also directly destroy tumor cells via photothermal or photodynamic therapy. In addition, organic nanoparticles can also achieve simultaneous imaging and cancer treatment, namely, "integration of diagnosis and treatment," which can help guide disease treatment and monitor treatment effects in real time. The applications of organic nanoparticles in the biomedical field (such as optical imaging, photothermal and photodynamic therapy, and biosensors) provide new strategies and means for the diagnosis and treatment of cancer.

Guest Editor

Dr. Xiaozhen Li

Institute of Flexible Electronics, Northwestern Polytechnical University, Xi'an 710072, China

Deadline for manuscript submissions

closed (20 November 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/203079

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced 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.

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, QC H3A 0C7, Canada

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 - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)