



materials



an Open Access Journal by MDPI

Nanozyme: Synthesis, Mechanisms, and Applications

Guest Editors:

Dr. Dongdong Wang

Division of Chemistry and Biological Chemistry, School of Physical and Mathematical Sciences, Nanyang Technological University, 21 Nanyang Link, Singapore 637371, Singapore

Dr. Jiawei Liu

Division of Chemistry and Biological Chemistry, School of Physical and Mathematical Sciences, Nanyang Technological University, 21 Nanyang Link, Singapore 637371, Singapore

Deadline for manuscript submissions:

closed (20 February 2022)

Message from the Guest Editors

Nanozymes are nanomaterials with enzyme-mimicking activities. Nanozymes are advantageous compared to natural enzymes due to their low cost, high stability, and long-term resistance to harsh conditions, and to date, numerous nanomaterials have been reported with enzyme-mimicking activities, such as Fe₃O₄ nanoparticles, noble metal nanoparticles, carbon nanostructures, metal-organic frameworks, etc.

The aim of this issue is to showcase unique enzyme-mimicking activities, explore solutions improving the catalytic ability of nanozymes, and study the mechanisms of catalytic reactions of nanozymes. By collecting knowledge in this field and covering a large number of synthesis methods and nanozyme applications, we aim to increase their scientific and commercial value in the field of cancer treatment, biosensing/imaging, antibacteria, ROS scavengers, environmental protection, heterogeneous catalysis, and enzymatic catalysis.



mdpi.com/si/87616

Special issue



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, QC H3A 0C7, Canada

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.

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

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)