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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

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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 Fe_3O_4 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.



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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

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

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