

Special Issue

Nanozyme: Synthesis, Mechanisms, and Applications

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.

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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.

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