

Special Issue

Engineered Nanozymes for Emerging Biomedical Applications

Message from the Guest Editor

Engineeringly designed nanostructures including nanoparticles, nanomaterials and composites display 'enzyme-like' activities (thereby having been named nanozymes) and have widely been explored as an alternative to natural enzymes for diverse applications, including biosensor, environmental, energy and biomedical applications, by virtue of their advantages of multienzyme-like characteristics, multifunctionalities, high catalytic stability, long storage and facile and easy preparation. In recent times, the engineering of nanozymes has included methods such as refining catalytic structures by mimicking natural enzymes, creating super-active surfaces, simulating behavior changes, mimicking the specific biological processes, and living organisms that maximize their functionalities and activities for diagnostic, therapeutic, and imaging applications. This Special Issue seeks to showcase research papers and review articles that focus on novel methodological developments of nanozyme synthesis, different engineering approaches for enhancing intrinsic catalytic activities, nanozyme-based biosensors, diagnostics design and therapeutic applications.

Guest Editor

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