

Special Issue

Polymer-Dot-Based Biosensors for Biomedical Applications

Message from the Guest Editor

Nano-fluorescence technology is playing an increasingly important role in modern biomedical research and shows great potential for applications in the detection, diagnosis and treatment of health and major diseases. Among them, semiconducting polymer nanoparticles, also known as polymer dots (Pdots) are a new type of organic optical nanomaterials that has been subject to in-depth research by researchers at home and abroad in recent years. Compared with traditional luminescent materials, polymer nanoparticles are particularly suitable for their outstanding characteristics, including extraordinary fluorescence brightness, fast emission rate, excellent photostability, and nonblinking and nontoxic features. Pdots have demonstrated utility in a wide range of applications such as fluorescence imaging and biosensing, such as cellular labeling, in vivo imaging, single-particle tracking, biosensing, and drug delivery. Pdot technology is expected to have a broad and lasting impact on biomedical imaging, diagnosis and therapy.

Guest Editor

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Message from the Editor-in-Chief

Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

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