Special Issue

Quantum Dots for Biomedical Applications

Message from the Guest Editor

Quantum dots have recently gained more attention after being the focus of the 2023 Nobel Prize announcements. Quantum dots possess unique optical and electronic properties, such as fluorescence that can be controlled by their size, high quantum yields, and photobleaching stability. Due to these properties, they are well-suited for various applications, including optical labeling in multiplexed imaging, single-molecule probes, real-time imaging of tumors, in vivo deep tissue imaging, and drug delivery detection systems. Quantum dots that emit near-infrared light are particularly advantageous. as they can easily penetrate tissue. This makes them useful in quiding surgeons during tumor removal procedures. We are excited to welcome a group of highly qualified contributors to this Special Issue. These contributors specialize in the application of quantum dots for molecular imaging, biosensing, medical diagnosis, drug delivery, and treatments.

Guest Editor

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