Special Issue

Electrochemiluminescence Quantum Dots for Analytical Sensing Applications of Protein Biomarkers

Message from the Guest Editor

Since Bard's report in 2002, silicon quantum dots in non-aqueous media have been studied for their potential in electrochemiluminescence (ECL) applications. QDs possess controllable sizes and exceptional luminescence properties, making them useful for sensitive detection of biomarkers in various fields. QDs-based ECL biosensors are being researched for their potential use in clinical diagnostics, environmental monitoring, and food safety assessment. Various sensing strategies for ECL analysis have been developed, but toxicity effects, biomass analysis, and detection efficiency need to be considered for commercial applications. Improving feasibility and reliability of QDs-based ECL biosensors is still a vital research goal to achieve high-sensitivity and selective detection of biomolecules.

Guest Editor

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