

عنوان مقاله:

Colorimetric gold nanoparticles-based aptasensors

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خلاصه مقاله:

Recognition of different agents including chemical and biological plays important role in forensic, biomedical and environmental field. In recent decades, nanotechnology and nano materials had a high impact on development of sensors. Using nanomaterials in construction of biosensors can effectively improve the Sensitivity and other features of biosensors. Different type of nanostructures including nanotubes, nanodiamonds, thin films, nanorods, nanoparticles (NP), nanofibers and various clusters have been explored and applied in construction of biosensors. Among nanomaterials mentioned above, gold nanoparticle (GNP) as a new class of unique fluorescence quenchers, is receiving significant attention in developing of optical biosensors because of their unique physical, chemical and biological properties. In this mini review, we discussed the use of GNPs in construction of colorimetric aptasensors as a class of optical sensors for detection of antibiotics, toxins and infection diseases.

کلمات کلیدی:

Colorimetric aptasensor, Gold Nanoparticles, Toxins, Antibiotics

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