

عنوان مقاله:

A review on Bioimaging, Biosensing, and Drug Delivery Systems Based on Graphene Quantum Dots

محل انتشار:

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خلاصه مقاله:

Graphene quantum dots (GQDs), which are the most capable carbon-based nanostructures, play a significant role in biological studies. These nanostructures show significant attributes including low toxicity, high solubility in numerous solvents, notable electronic characteristics, strong chemical inertness, high specific surface areas, and abundant sites for functionalization. In addition, GQDs have adaptability as well as capability to be improved via absorbent surface chemicals as well as the addition of modifiers or nanoparticles. Accordingly, we have presented here the fundamental properties, synthesis techniques, and the applications of GQDs in biosensing, bioimaging, and drug delivery. It is worth mentioning that toxicity is a significant issue which has restricted biological applications of QDs. Hence, the .toxicological features of GQDs have been covered in this review paper

کلمات کلیدی:

Graphene quantum dots, Nanotechnology, Drug Delivery, bioimaging, Biosensing

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