

عنوان مقاله:

Electrochemical Behavior of Benzoxanthene Compound in Modified Glassy Carbon Electrode by Zinc Sulfide Particles Warped in CNT/RGO Nanosheets for Determination of Hydrazine

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خلاصه مقاله:

Recently, different significant efforts have been made to fabricate an effectively modified electrode for replying to the growing requests for enhanced performance electrodes for electrochemical sensors. Herein, we introduced an organic material along with a composite of the zinc sulfide (ZnS) particles distributed in the substrate of carbon nanotubes (CNTs)/reduced graphene oxide (RGO) nanosheets by using an inexpensive, simple, and one-step fabrication method, as an effectively modified electrode for the determination of hydrazine as an analyte. This electrode represents a great electrochemical performance with a large linear range ($0.01 \mu\text{M}$ - $60.0 \mu\text{M}$) and a proper limit of detection value ($0.006 \mu\text{M}$) for determination of hydrazine. Good recovery percentage values for the proposed sensor confirm its excellent ability to measure hydrazine.

کلمات کلیدی:

Zinc Sulfide, Reduced graphene oxide, electrochemical sensor, Hydrazine

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