Short Communication

Highly Sensitive Electrochemical Sensing Platform for Hydrazine Detection

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doi: 10.20964/2018.04.38

Received: 19 December 2017 / Accepted: 13 February 2018 / Published: 6 March 2018

In the present study, the *Plectranthus amboinicus* leaf extract was employed for the biosynthesis of ZnO nanoparticles (NPs). Then, a novel electrochemical sensor was fabricated based on the ZnO NP-coated glassy carbon electrode (GCE) and used for the detection of the organic pollutant hydrazine. Our proposed sensor showed high electrocatalytic activity, selectivity, sensitivity, and stability towards the determination of hydrazine. The factors for the high activity sensor include an optimal electronic property, a high charge transfer rate, a high electroactive surface area, along with its nanocrystalline nature.

Keywords: Hydrazine; Biosynthesis; ZnO NPs; Electrochemical determination; Sensor

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