



演 題 : **Electrochemical Detection Based on BDD Electrode**

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要旨 :

Boron doped diamond (BDD) is an attractive electrode material due to its wide electrochemical potential windows in aqueous solution and nonaqueous media and extreme electrochemical stability compared with other carbon electrodes, e.g., glassy carbon (GC), pyrolytic graphite (PG), and highly oriented pyrolytic graphite (HOPG), which have been widely used as common electrode materials for last decades. In present study, the electrochemical characterizations of Au nanoparticles deposited on BDD electrodes were carried out, mainly on electrocatalytic activities for oxygen reduction. And we found that it is possible to achieve both high sensitivity and high selectivity for SE in the presence of AA in phosphate buffer solution poly(N,N-dimethyl aniline) (PDMA) coated BDD electrode.

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