Short Communication

Graphene Ink Fabricated Screen Printed Electrode for Cd\(^{2+}\) and Pd\(^{2+}\) Determination in Xiangjiang River

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A disposable and sensitive screen-printed electrode constructed with an ink containing graphene was successfully prepared. Owing to the combination of the disposable characteristic of electrode and specific advantages of graphene, the as-prepared electrode demonstrated low background current, fast electron transfer kinetics and wide potential window. Screen-printed graphene electrode (SPG) exhibited excellent electrocatalytic activity in the simultaneous determination of Cd\(^{2+}\) and Pb\(^{2+}\). Moreover, the proposed SPG was also successfully employed for the determination of concentrations of Pb\(^{2+}\) and Cd\(^{2+}\) in Xiangjiang river in China.

Keywords: Graphene ink; Screen-printed electrode; Cd\(^{2+}\); Pd\(^{2+}\); Electrochemical sensor; Xiangjiang river

FULL TEXT

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