

Sensitive Determination of Lead(II), Copper(II), and Mercury(II) Based on B/P-doped Ordered Mesoporous Carbons

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The B/P-doped ordered mesoporous carbons (B/P-doped OMCs) were synthesized as a surface modification of electrode, which has result in some latest developments of electrochemical sensors for detecting heavy metal ions. In this study, boron and phosphorus were co-incorporated into OMCs through a facile aqueous self-assembly using a hydrothermal doping strategy. The structure and its electrochemical performance were studied, the B/P-doped OMCs not only owns the common features of carbon material ,but also demonstrate the advanced eletrochemical detecting capacities on lead(II), copper(II), and mercury(II).

Keywords: B/P-modified ordered mesoporous carbons, detect, lead(II), copper(II) ; mercury(II)

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