

Fabrication of stable nanostructure PbO₂ Coating on the Semiconducting ceramic materials

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The stability of PbO₂ is increased by the depositing the PbO₂ on the semiconducting ceramic materials such as BaTiO₃. There is lot of methods to synthesis BaTiO₃ such as electrochemical-hydrothermal, sol-gel. Here we focused on the electrochemical synthesis of BaTiO₃ on the Ti plate electrode, followed by the PbO₂ coating at optimum condition. The electrode is characterized by the XRD, SEM, and Cyclic voltammetry. The Fabricated PbO₂ electrode has high stability than Ti/PbO₂ electrode.