

عنوان مقاله:

AN INVESTIGATION ON THE PERFORMANCE OF PPY/NANOPTCOMPOSTE LAYER AS OXYGEN REDUCTION REACTION CATALYST

محل انتشار:

سومین کنفرانس بین المللی مواد فوق ریزدانه و نانوساختار (سال: 1390)

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خلاصه مقاله:

Lots of attention has been paid to the Fuel cells as new sources of clean electrical energy. Main problem of these energy conversion devices are their cost and low reaction rate. Catalysts are used to enhance the reaction rates especially for Oxygen reduction reaction. Platinum is the most common catalyst which is used for this propose. Platinum catalyst layer and ppy/nano Pt catalyst layer were applied on graphite electrode using electrochemical method. Rotating disk electrode and cathodic polarization tests were used to study the efficiency of catalysts. Cross section, morphology and elemental analysis were studied by SEM. Results showed that ppy/nano Platinum composite .layer has more catalytic performance than normal structure Platinum in the form of a layer

کلمات کلیدی:

Oxygen reduction reaction, Polypyrrole, nano Platine, Composite catalyst layer

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