

## عنوان مقاله:

Highly active metal organic framework composite for oxygen reduction reaction in alkaline medium

## محل انتشار:

یازدهمین سمینار سالانه الکتروشیمی ایران (سال: 1394)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Developing economical and commercially available materials to replace precious and nondurable platinum based catalysts is a very important issue in contemporary fuel cell technology [1]. Nanostructured carbon materials have the potential to reduce the costs, improve the fuel tolerance and scalability; however, they are limited presently by their relatively low catalytic activity [2]. Herein, we have synthesized a new electrocatalyst for the oxygen reduction reaction derived from in situ growth of metal-organic frameworks on carbon nanotubes, followed by pyrolysis. The most efficient catalyst yielded comparable catalytic activity than commercial platinum-based catalysts. The electrochemical measurements were carried out in alkaline medium. The synthesized MOF/CNT composite showed a comparable activity with Pt/C.

## کلمات کلیدی:

MOF, Oxygen reduction reaction

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/546276>

