عنوان مقاله:

Synthesis of Nanofiber Composite Conjugated with of Ni-Co oxides as a electrocatalyst for oxygen reduction reaction and oxygen evaluation reaction

محل انتشار:

ششمین کنگره ملی تحقیقات راهبردی درشیمی و مهندسی شیمی با تاکید بر فناوری های بومی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 15

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خلاصه مقاله:

Biomass has some advantages including renewability, abundant resources, being eco-friendly, easy processing, and low cost; and it is an important step in designing electrocatalysts in fuel cells as clean energy sources. In this case, the composite nanofiber-based on Ni-Co oxides and karrapo (KP) were used as available biomass. The physicochemical techniques including XRD, FT-IR, EDX, FESEM, TEM, TGA, BJH, BET, and electrochemical techniques were used to evaluate the surface morphology, crystal structure, and electrochemical performance of composites. For the first time, Ni-Co oxides and KP were used to produce new electrocatalyst for the oxygen reduction reaction (ORR) and oxygen evaluation reaction (OER).

کلمات کلیدی:

Biomass, Nanofiber composite, Ni-Co oxides, Oxygen reduction reaction, Oxygen evaluation reaction