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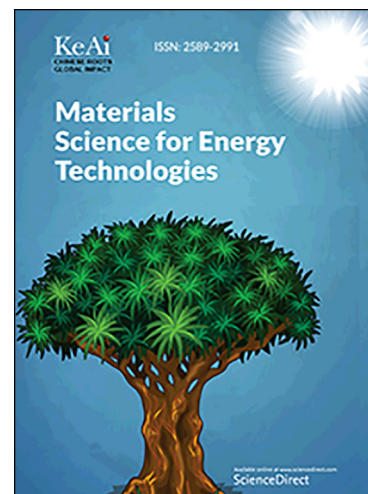
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Biocompatible Mediated Bioanode prepared by using Poly(3,4-ethylene dioxythiophene) poly(styrene sulfonate) (PEDOT:PSS) and Sulfonated Graphene Oxide Integrated Enzyme For Biofuel Cells Applications

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Abstract

In this study, a bioanode for biofuel cells was produced using a composite of poly(3,4-ethylene dioxythiophene)-poly(styrene sulfonate) (PEDOT:PSS) and sulfonated graphene oxide (SGO) wherein SGO shows synergistic impact by going about as charge adjusting dopant and a conductive filler. The conducting polymer PEDOT:PSS alongside SGO fill in as a way to encourage electron transfer and co-immobilize the enzyme in the meantime. Extensive surface area controlled by SGO prompts high catalyst stacking and empowers to enhance the current density of the fuel cells. Ferritin additionally upgrades the transportation of electrons by going about as a redox mediator that effectively transfers electrons from enzyme to the conducting support. Examination of electrochemical execution of modified bioanode in presence of glucose was completed by cyclic voltammetry (CV) and linear sweep voltammetry (LSV) at various scan

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