

عنوان مقاله:

Energy Harvesting from Microbial Fuel Cell Using a Power Management System: A Review

محل انتشار:

کنفرانس بین المللی نوآوری و تحقیق در علوم مهندسی (ICIRES ۲۰۱۸) (سال: 1397)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Farshad Abavisani - Chemical Engineering Department Faculty of Engineering, Ferdowsi University of Mashhad
Mashhad, Iran

Mahmood Akhavan Mahdavi
Reza Gheshlaghi

خلاصه مقاله:

Microbial fuel cells (MFCs) are renewable energy sources which generate electric current consuming organic substrate. Due to the low output voltage and current, the MFCs are not able to directly power most of commercial loads. A Power Management System (PMS) is a bridge between MFC and the device which stores the energy produced and discharges it in order to run a final load. Owing to the energy loss, and long charging time of PMSs a maximum power point tracking (MPPT) system has been integrated into the PMS to enhance the power efficiency of PMSs. This study aims to review and discuss the characteristics of preliminary PMSs and new generations that use MPP algorithms.

کلمات کلیدی:

Microbial fuel cell, Power management system, Maximum power point tracking

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/787394>

