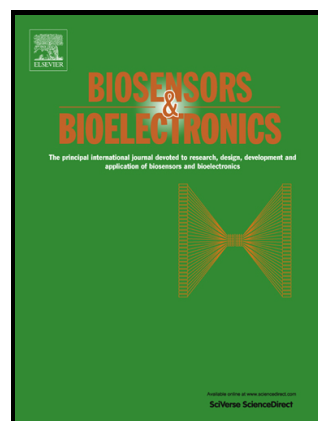


Author's Accepted Manuscript

Electricity production from Azo dye wastewater using a microbial fuel cell coupled constructed wetland operating under different operating conditions

Zhou Fang, Hai-liang Song, Ning Cang, Xian-ning Li



www.elsevier.com/locate/bios

PII: S0956-5663(14)01001-X
DOI: <http://dx.doi.org/10.1016/j.bios.2014.12.047>
Reference: BIOS7363

To appear in: *Biosensors and Bioelectronic*

Received date: 19 November 2014

Accepted date: 22 December 2014

Cite this article as: Zhou Fang, Hai-liang Song, Ning Cang and Xian-ning Li, Electricity production from Azo dye wastewater using a microbial fuel cell coupled constructed wetland operating under different operating conditions, *Biosensors and Bioelectronic*, <http://dx.doi.org/10.1016/j.bios.2014.12.047>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Electricity production from Azo dye wastewater using a microbial fuel cell coupled constructed wetland operating under different operating conditions

Zhou Fang, Hai-liang Song, Ning Cang, Xian-ning Li*

School of Energy and Environment, Southeast University, Nanjing 210096, China.

*Corresponding author address: School of Energy and Environment, Southeast University, Nanjing 210096, China. Tel.: +86 13776650963; fax: +86 025 83795618.

E-mail addresses: lxNSEU@163.com (X.-n. Li)

Corresponding Author

* Xian-ning Li, Tel.: +86 13776650963; fax: +86 025 83795618. *E-mail addresses:* lxNSEU@163.com

ABSTRACT

Microbial fuel cells (MFCs) have got tremendous attention for their capability to enhance the degradation of some recalcitrant pollutants and simultaneous electricity production. A microbial fuel cell coupled constructed wetland (CW-MFC) is a new device to treat the wastewater and produce energy which has more wastewater treatment volume and more easily to maintenance than others MFCs. The studies on the performance of CW-MFCs are necessary. In this work, the effects of hydraulic residence time (HRT), reactive brilliant red X-3B (ABRX3) proportion and COD concentration on the electricity production of CW-MFC and the degradation

Download English Version:

<https://daneshyari.com/en/article/7232338>

Download Persian Version:

<https://daneshyari.com/article/7232338>

[Daneshyari.com](https://daneshyari.com)