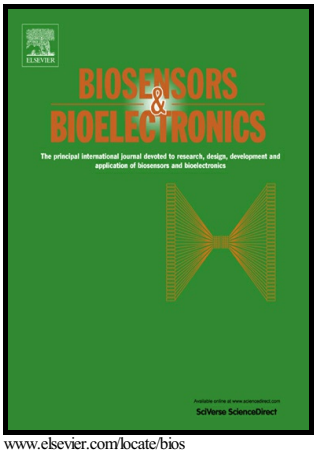

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PII: S0956-5663(18)30674-2
DOI: https://doi.org/10.1016/j.bios.2018.08.066
Reference: BIOS10730

To appear in: *Biosensors and Bioelectronic*

Received date: 9 July 2018
Revised date: 22 August 2018
Accepted date: 27 August 2018

Cite this article as: Chengmei Liao, Jiali Wu, Lean Zhou, Tian Li, Jingkun An, Zongliang Huang, Nan Li and Xin Wang, Repeated Transfer Enriches Highly Active Electrotrophic Microbial Consortia on Biocathodes in Microbial Fuel Cells, *Biosensors and Bioelectronic,* https://doi.org/10.1016/j.bios.2018.08.066

Date: July 9, 2018
Submitted to: *Biosensors & Bioelectronics*

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Abstract

Cathodic oxygen reduction catalyzed by autotrophic bacteria instead of a precious metal is a promising method to make use of microbial fuel cells (MFCs) in wastewater treatment with electricity production. However, the ecology of electrotrophic microbial consortia in wastewater systems that function as the catalyst for cathodic oxygen reduction is complicated and the electron transfer mechanisms are still unknown, which prevents further improvements of the biocathode