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PII: S0960-8524(18)31382-8
DOI: https://doi.org/10.1016/j.biortech.2018.09.129
Reference: BITE 20545

To appear in: *Bioresource Technology*

Received Date: 1 August 2018
Revised Date: 24 September 2018
Accepted Date: 25 September 2018

Please cite this article as: Lassouane, F., Aït-Amar, H., Amrani, S., Rodriguez-Couto, S., A promising laccase immobilization approach for Bisphenol A removal from aqueous solutions, *Bioresource Technology* (2018), doi: https://doi.org/10.1016/j.biortech.2018.09.129

A promising laccase immobilization approach for Bisphenol A removal from aqueous solutions

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Abstract

The immobilization of crude laccase from *Trametes pubescens* by glutaraldehyde crosslinking prior to entrapment into Ca-alginate beads increased the immobilization yield by 30% and reduced the leaking by 7-fold compared to the immobilization with no crosslinking. The performance of the newly developed biocatalyst to degrade Bisphenol A (BPA) from aqueous solutions was tested. Thus, operating at optimal conditions (i.e. pH 5, 30ºC, 20 mg L^{-1} BPA and 1500 U L^{-1} laccase), a BPA removal higher than 99% in 2 h was achieved. This value is higher than those reported to date for BPA removal

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