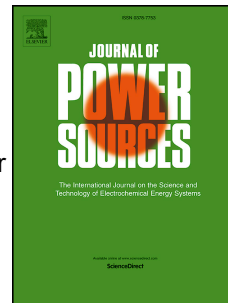


Accepted Manuscript

Enhanced photovoltaic properties of modified redox electrolyte in dye-sensitized solar cells using tributyl phosphate as additive

Malihe Afrooz, Hossein Dehghani



PII: S0378-7753(14)00438-8

DOI: [10.1016/j.jpowsour.2014.03.115](https://doi.org/10.1016/j.jpowsour.2014.03.115)

Reference: POWER 18890

To appear in: *Journal of Power Sources*

Received Date: 18 December 2013

Revised Date: 9 March 2014

Accepted Date: 24 March 2014

Please cite this article as: M. Afrooz, H. Dehghani, Enhanced photovoltaic properties of modified redox electrolyte in dye-sensitized solar cells using tributyl phosphate as additive, *Journal of Power Sources* (2014), doi: 10.1016/j.jpowsour.2014.03.115.

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 proof before it is published in its final 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.

Highlights

- TBPP suppresses the electron recombination that leads to the increase in J_{sc} .
- The TBPP additive also causes to accumulation of electrons in the CB of TiO_2 .
- The TBPP additive shifts the CB that leads to significantly improvement in V_{oc} .
- This simple modification can significantly improve the performance of DSSCs.

Download English Version:

<https://daneshyari.com/en/article/7736984>

Download Persian Version:

<https://daneshyari.com/article/7736984>

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