

Increase of open circuit voltage of polymer bulk heterojunction solar cell by functionalized single walled carbon nanotubes

Submitted by Pietrick Hudhomme on Wed, 04/29/2015 - 21:57

Titre	Increase of open circuit voltage of polymer bulk heterojunction solar cell by functionalized single walled carbon nanotubes
Type de publication	Article de revue
Auteur	Derbal-Habak, Hassina [1], Bergeret, C�line [2], Cousseau, Jack [3], Nunzi, Jean-Michel [4]
Type	Article scientifique dans une revue � comit� de lecture
Ann�e	2015
Langue	Anglais
Date	april 2015
Num�ro	2
Pagination	59-64
Volume	1
Titre de la revue	Advanced Device Materials
ISSN	2055-0316
Mots-cl�s	Bulk heterojunction [5], open circuit voltage [6], Organic solar cell [7], Single wall carbon nanotube [8]
R�sum� en anglais	We report on an improvement of the open circuit voltage over 0.8V, together with decent fill factor and large short circuit current, through the incorporation of ester-functionalized single wall carbon nanotubes in a poly(3-hexylthiophene): 1-(3-methoxycarbonyl) propyl-1-phenyl[6,6]C ₆₁ bulk heterojunction solar cell. The technique may open new margins for an extra efficiency enhancement through increase of the open circuit voltage using state of the art highly crystalline low band gap bulk heterojunction polymer solar cells.
URL de la notice	http://okina.univ-angers.fr/publications/ua10592 [9]
DOI	10.1179/2055031615Y.0000000001 [10]

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=3045](http://okina.univ-angers.fr/publications?f[author]=3045)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=2606](http://okina.univ-angers.fr/publications?f[author]=2606)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=2607](http://okina.univ-angers.fr/publications?f[author]=2607)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=2589](http://okina.univ-angers.fr/publications?f[author]=2589)
- [5] [http://okina.univ-angers.fr/publications?f\[keyword\]=4883](http://okina.univ-angers.fr/publications?f[keyword]=4883)
- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=16359](http://okina.univ-angers.fr/publications?f[keyword]=16359)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=17150](http://okina.univ-angers.fr/publications?f[keyword]=17150)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=17151](http://okina.univ-angers.fr/publications?f[keyword]=17151)

[9] <http://okina.univ-angers.fr/publications/ua10592>

[10] <http://dx.doi.org/10.1179/2055031615Y.0000000001>

Publié sur *Okina* (<http://okina.univ-angers.fr>)