



Open circuit voltage of organic photovoltaic cells using C60 as acceptor: variation with the donor

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Résumé en anglais	<p>The open circuit voltage (V_{oc}) of organic photovoltaic cells (OPVs) is an important parameter in terms of OPV performance. In the present work, we check that its value depends on the energy difference between the Lowest Unoccupied Molecular Orbital of the electron acceptor (LUMO) and the Highest Occupied Molecular Orbital of the donor (HOMO). The electron acceptor is the fullerene, while the electron acceptors are used as parameter. The results show that V_{oc} increases with the value of $\Delta(LUMO-HOMO)$. However, for some molecules, this increase is not linear, which shows that other parameters are also determinant.</p>
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Liens

[1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=21424>

[2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=3568>

[3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=21394>

[4] <http://okina.univ-angers.fr/c.bernedede/publications>

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[6] <http://dx.doi.org/10.1051/epjap/2019190047>

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