



Effects of Anthryl Groups on the Charge Transport and Photovoltaic Properties of Small Triarylamine-Based Donor-Acceptor Molecules: A Joint Experimental and Theoretical Study

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Résumé en anglais	<p>The effects of replacing one of the outer phenyl rings of triphenylamine by 2-anthryl and 9-anthryl groups of triphenylamine (TPA) have been investigated on two small push-pull molecules consisting of a triarylamine donor block connected to a dicyanovinyl acceptor via a thienyl spacer. UV-Vis absorption, cyclic voltammetry and theoretical calculations show that the mode of linkage of the anthryl group has a limited influence on the electronic properties of the molecule compared to reference compound based on TPA. However experimental and theoretical results show that this simple structural modification exerts a major impact on the hole-mobility of the resulting materials and thus on their efficiency as donor in planar heterojunction solar cells.</p>
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Liens

[1] <http://okina.univ-angers.fr/yuejiang/publications>

- [2] <http://okina.univ-angers.fr/clement.cabanetos/publications>
- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26403>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=27192>
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