

Spirobifluorene based small push-pull molecules for organic photovoltaic applications

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R sum  en anglais Four analogous push-pull systems have been synthesized. If the latter all involve the same electron rich diphenylamine termination (D) and π -conjugating spacer (p) they differ from their electron withdrawing groups (A) and more importantly by their linear or 3D structure. Indeed, two push-pull spirobifluorene derivatives, which present two perpendicular D-p-A systems by molecule, are compared to their linear analogues. After description of their syntheses, spectroscopic and electrochemical properties, comforted by theoretical calculations, are discussed and compared. Then, a preliminary evaluation of compounds as active materials in organic solar cells is presented and demonstrates the potential interest of spiro-based derivatives for organic photovoltaics.

URL de la notice <http://okina.univ-angers.fr/publications/ua16599> [12]

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Lien vers le document <http://www.sciencedirect.com/science/article/pii/S0143720816308087?via%3...> [14]

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

[2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=29925>

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- [13] <http://dx.doi.org/10.1016/j.dyepig.2017.01.034>
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