

Supporting information

Synthesis of the diketopyrrolopyrrole/terpyridine substituted carbazole derivatives based polythiophenes for photovoltaic cells

Shih-Hao Wang¹, Teng-Wei Wang¹, Hsieh-Chih Tsai², Po-Chih Yang³, Chih-Feng Huang¹, and Rong-Ho Lee^{1,*}

¹ Department of Chemical Engineering, National Chung Hsing University, Taichung 402, Taiwan.
g104065053@smail.nchu.edu.tw; asd0910786375@gmail.com

² Graduate Institute of Applied Sci. and Tech., National Taiwan University of Science and Technology, Taipei 10607, Taiwan. h.c.tsai@gapps.ntust.edu.tw

³ Department of Chemical Engineering and Materials Science, Yuan Ze University, Taoyuan City 320, Taiwan.
pcyang@saturn.yzu.edu.tw

* Correspondence: rhl@nchu.edu.tw; tel.: +886-4-22854308; fax: +886-4-22854734.

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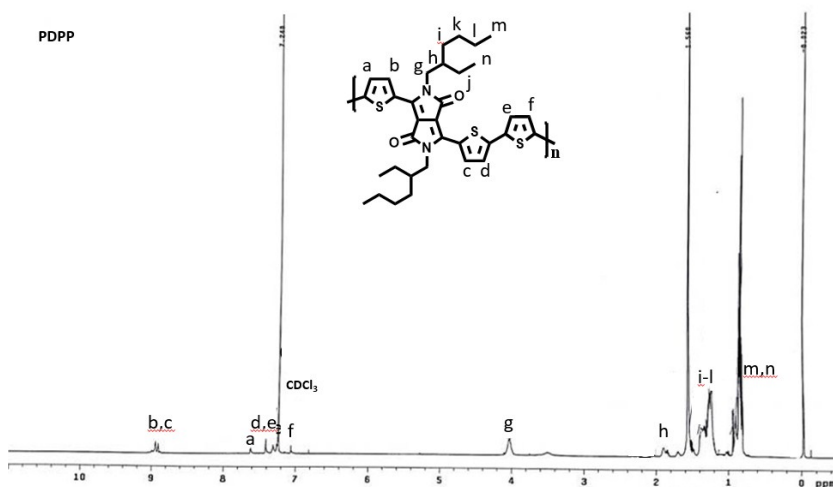


Figure S1. ¹H NMR spectrum of PDPP.

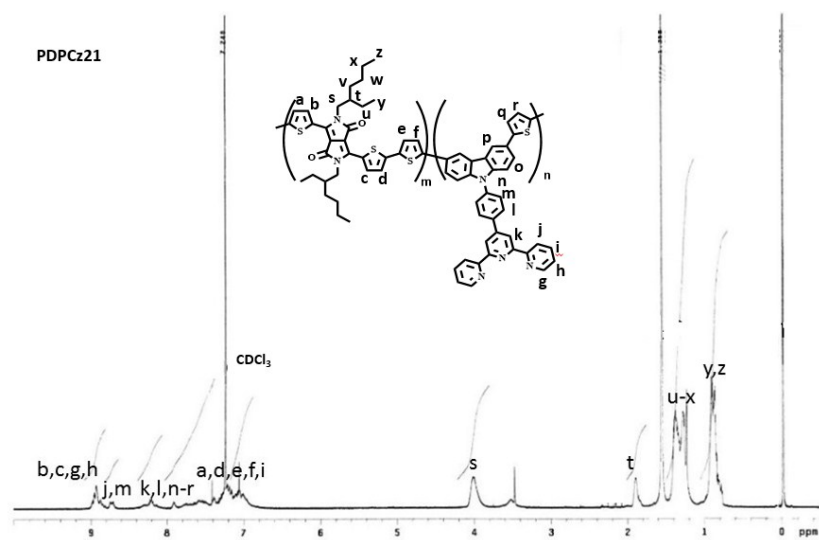


Figure S2. ¹H NMR spectrum of **PDPCz21**.

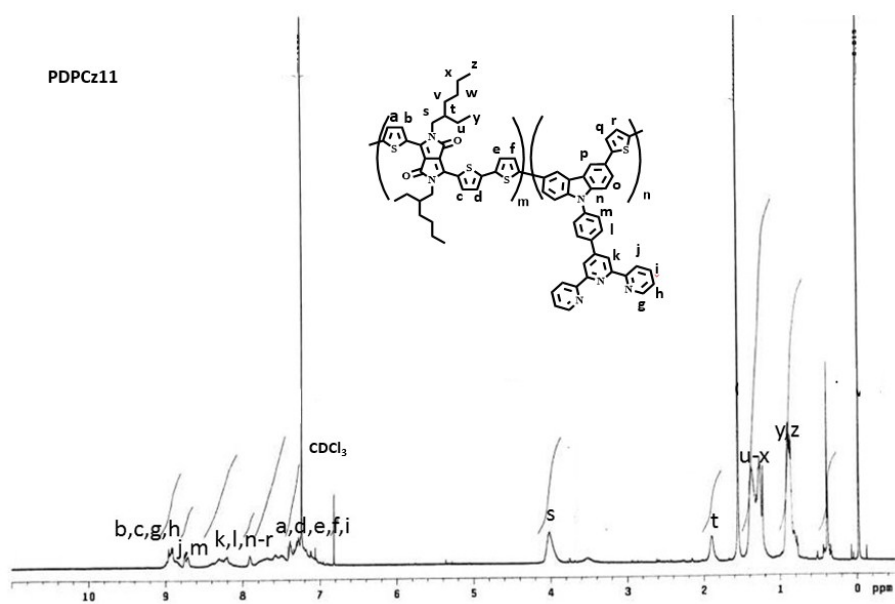


Figure S3. ¹H NMR spectrum of **PDPCz11**.

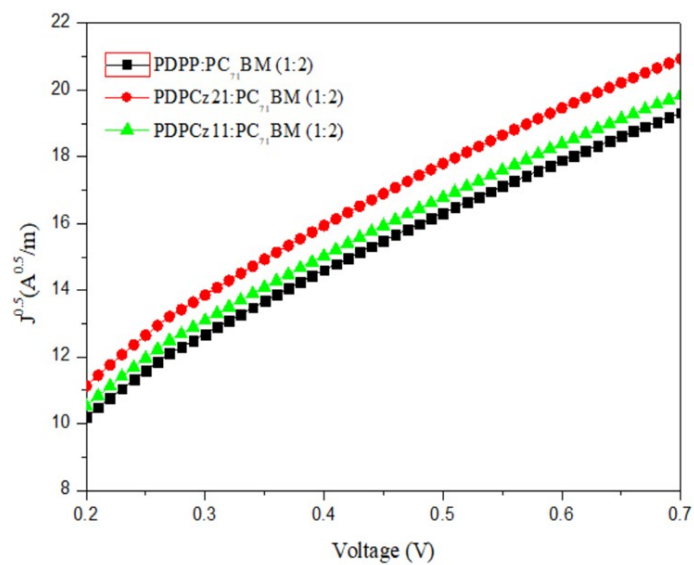


Fig S4. Plots of $(J)^{0.5}$ vs. V of hole-only devices incorporating PT/PC₇₁BM blends (1:2, w/w).