

Supporting Information

Output Current Enhancement of Hexylthiophene Functionalized D- π -Extended-A Triphenylamine in Dye Sensitized Solar Cells

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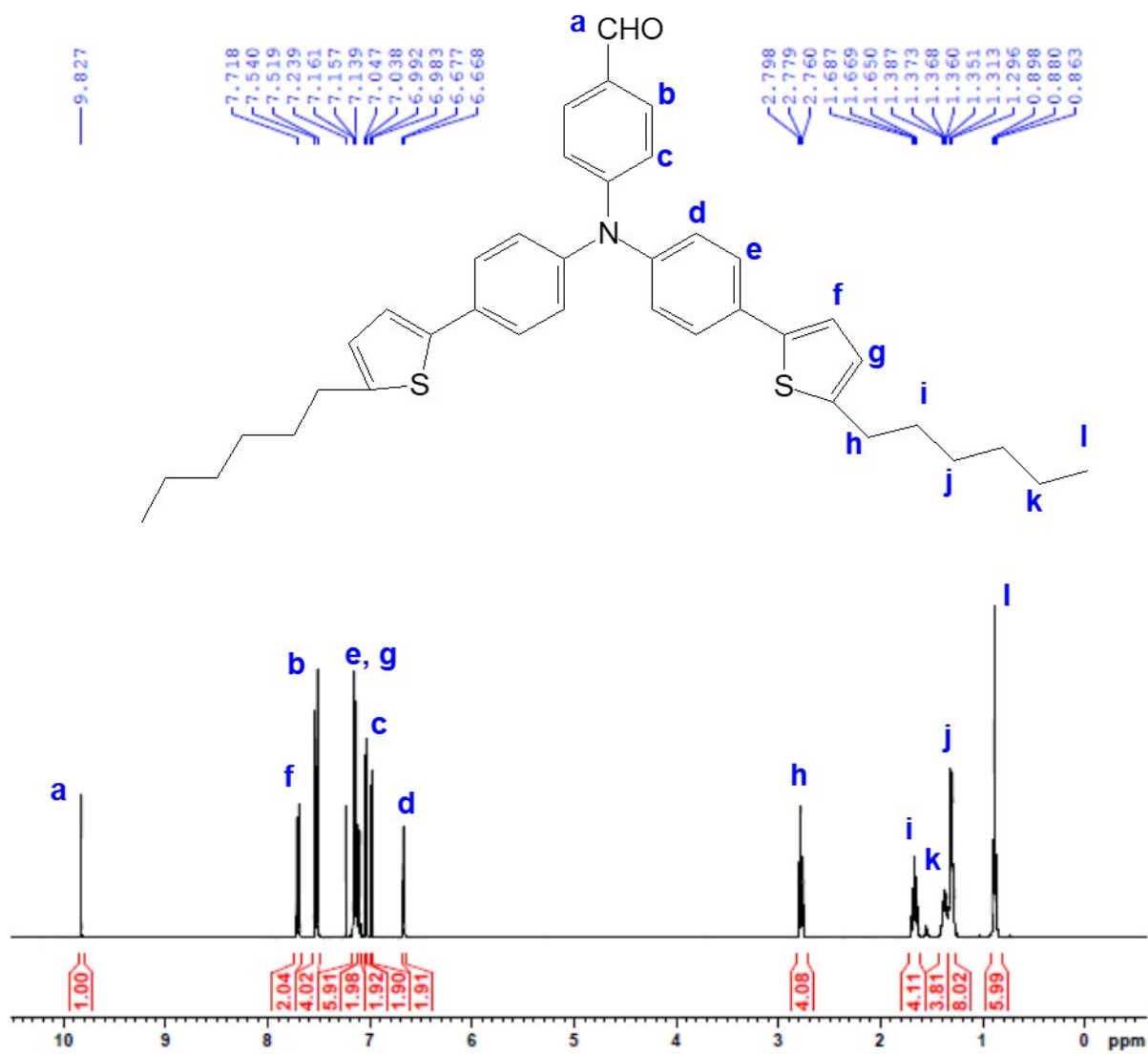


Figure S1. ¹H NMR spectrum of 4-(bis(4-(5-hexylthiophen-2-yl)phenyl)amino)benzaldehyde (2).

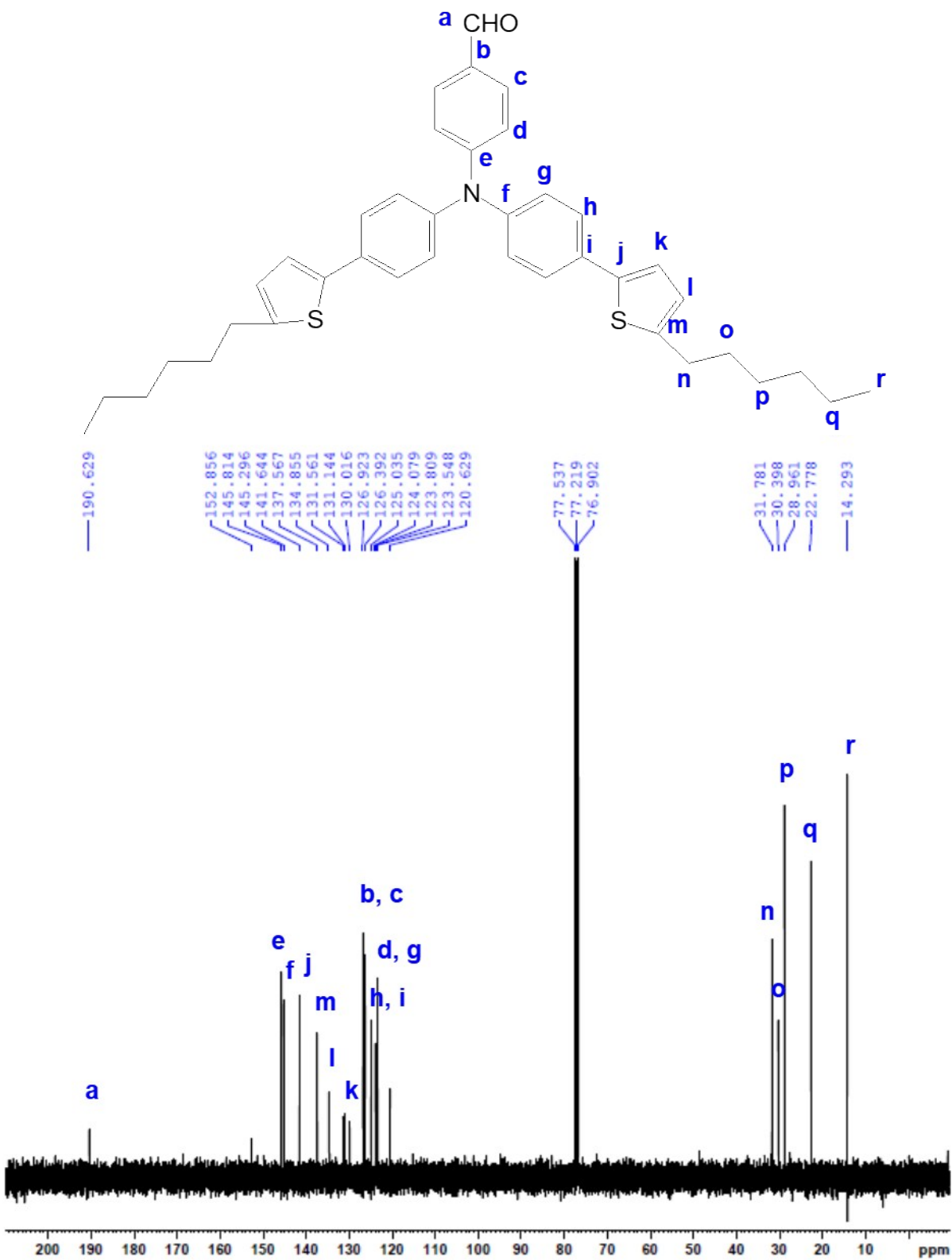


Figure S2. ¹³C NMR spectrum of 4-(bis(4-(5-hexylthiophen-2-yl)phenyl)amino)benzaldehyde

(2).

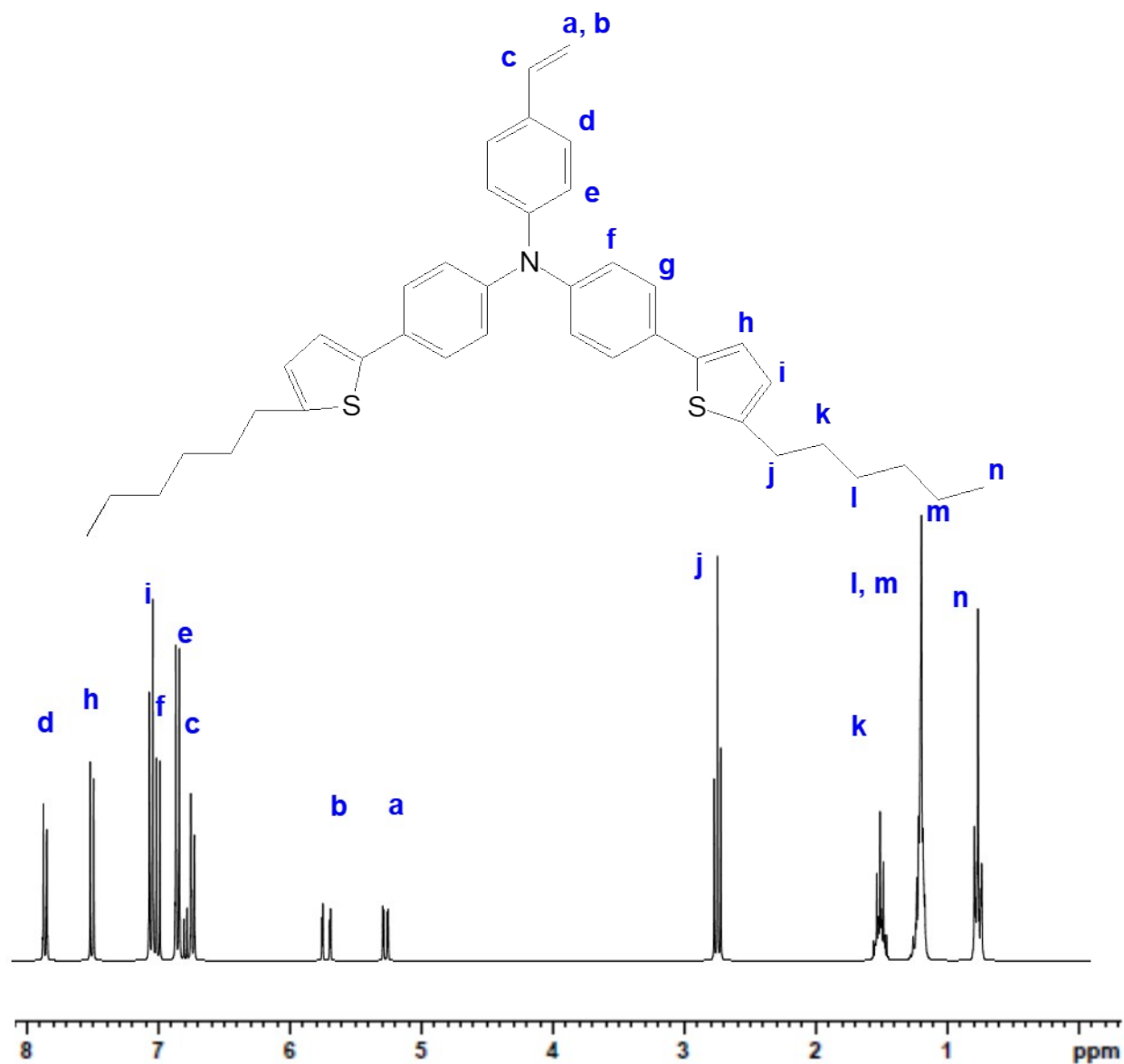


Figure S3. ¹H NMR spectrum of bis-(4-(5-hexylthiophene-2-yl)phenyl)-N-(4-vinylphenyl)benzenamine (**3**).

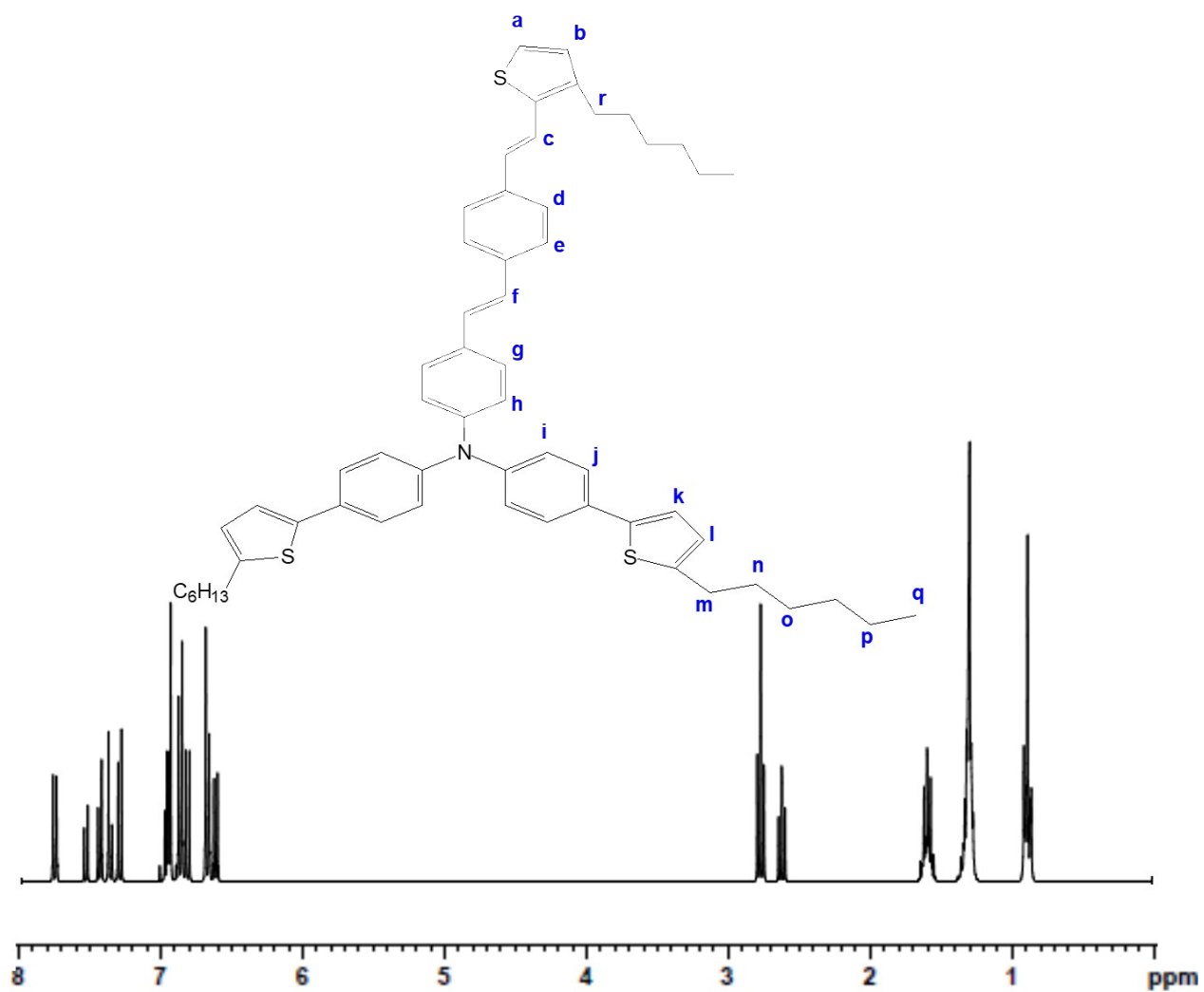


Figure S4. ¹H NMR spectrum of (4-(4(2-(3-hexylthiophene-2-yl)styryl)phenyl)-4-(5-hexylthiophene-2-yl)-4-(5-hexylthiophene-2-yl)phenyl)benzenamine (**4**).

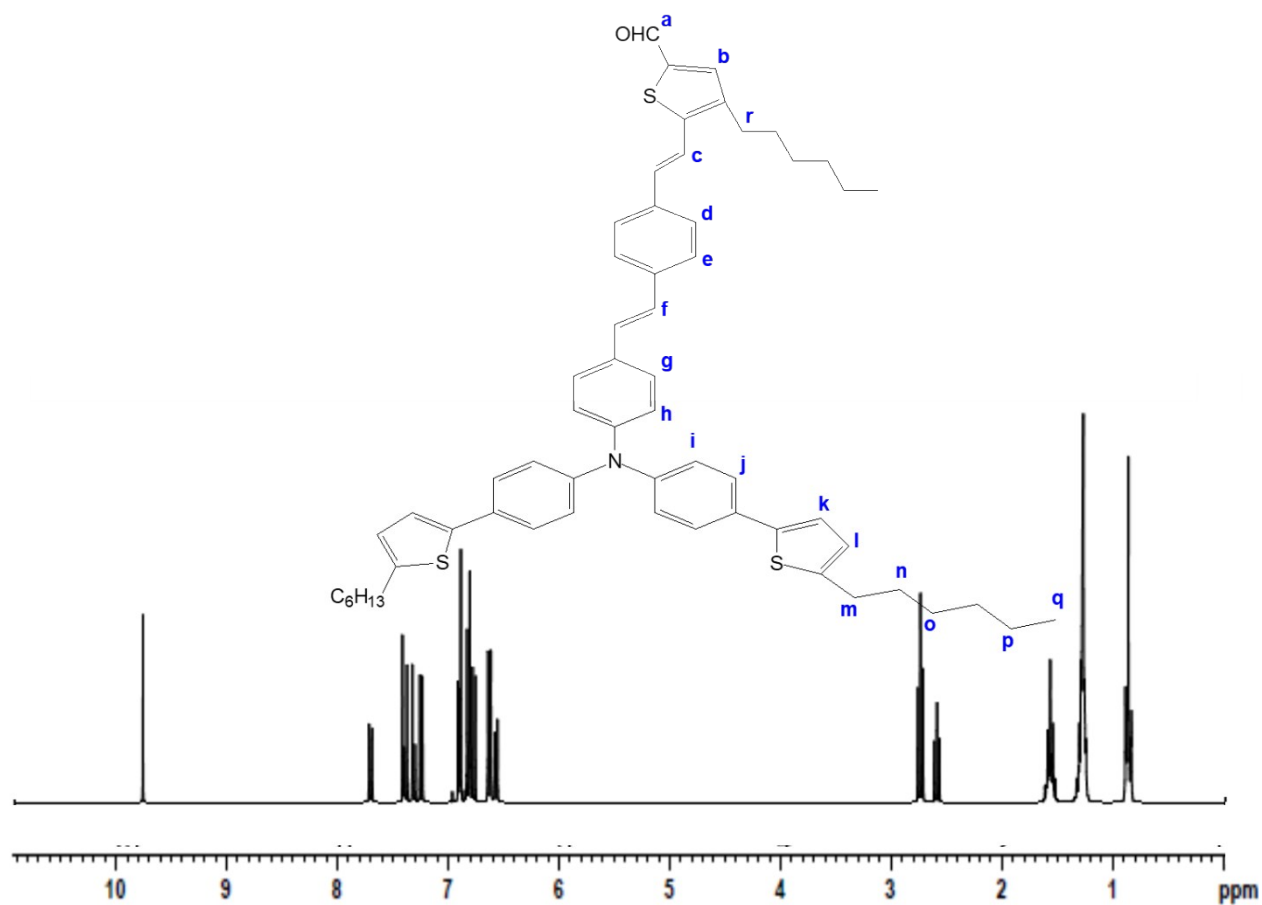


Figure S5. ¹H NMR spectrum of 5-(4-(bis(4-(5-hexylthiophene-2-yl)phenyl)amino)styryl)-4-hexylthiophene-2-carbaldehyde (**5**).

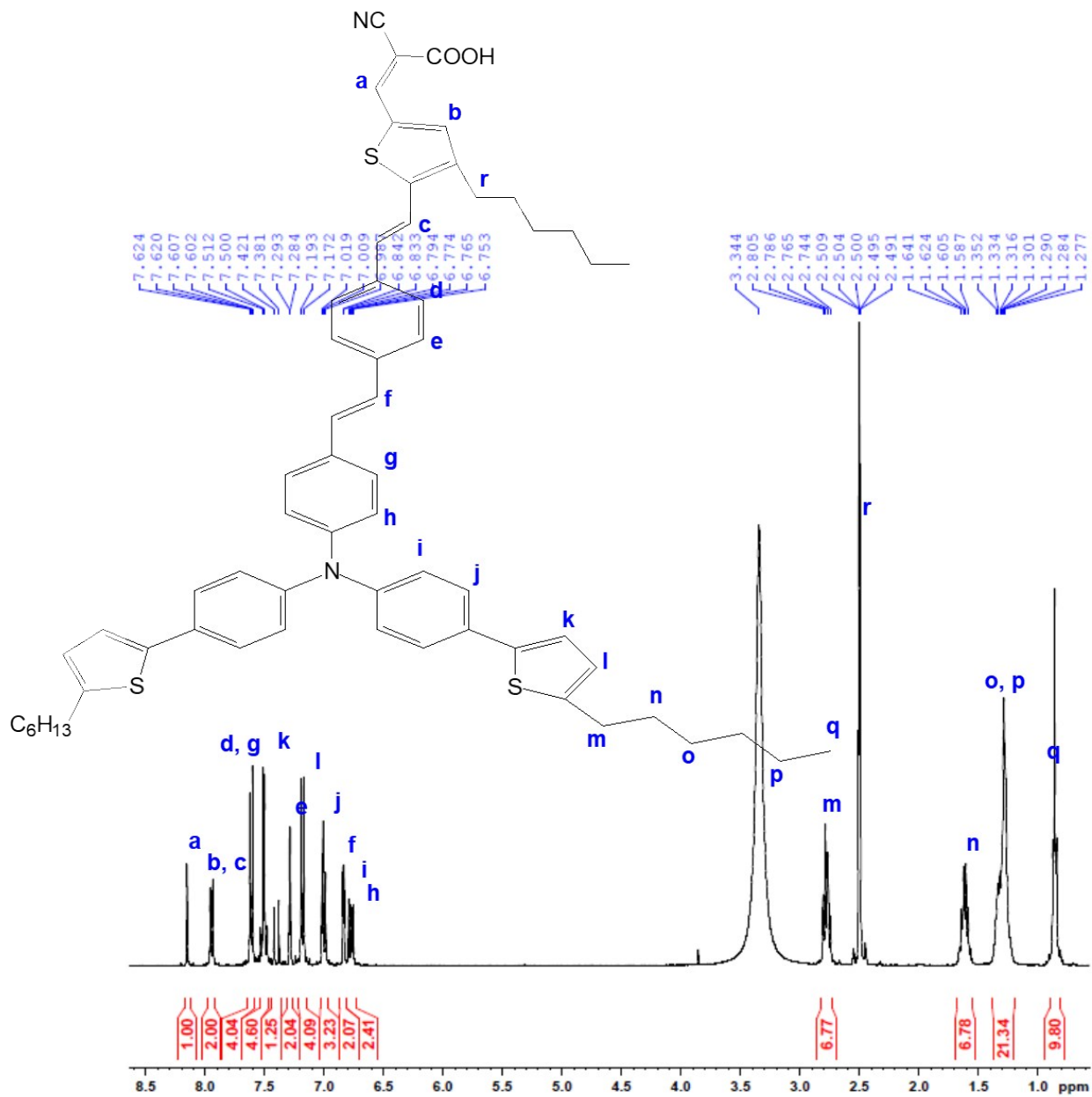


Figure S6. ¹H NMR spectrum of MY-102.

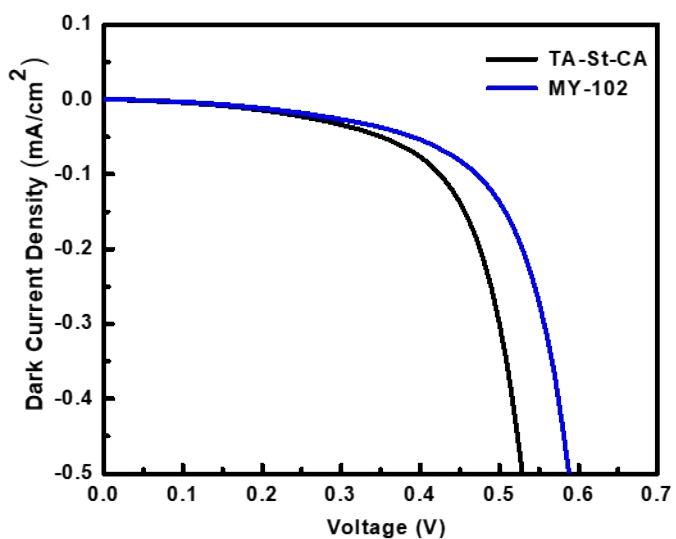


Fig. S7. J - V characteristics of MY-102 under dark conditions.

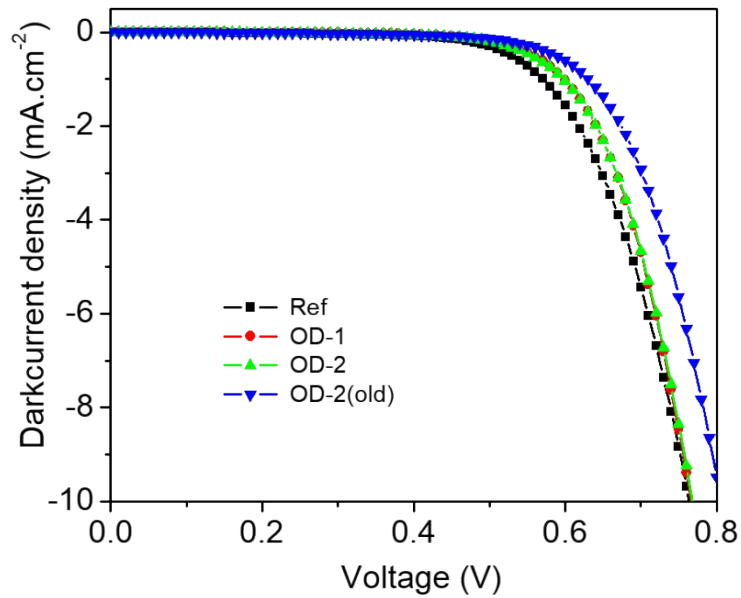


Fig. S8. J - V characteristics of MY-102 in Co(II/III) electrolyte under dark conditions.

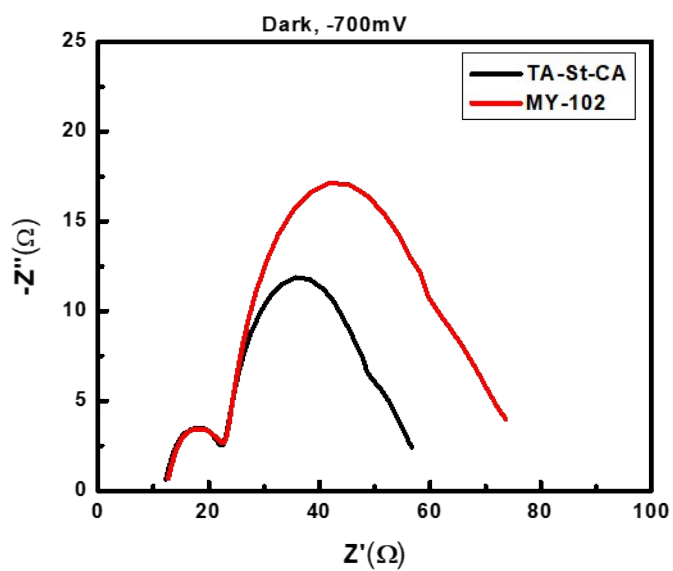


Fig. S9. Electrochemical Impedance Spectrum of MY-102 under dark conditions.

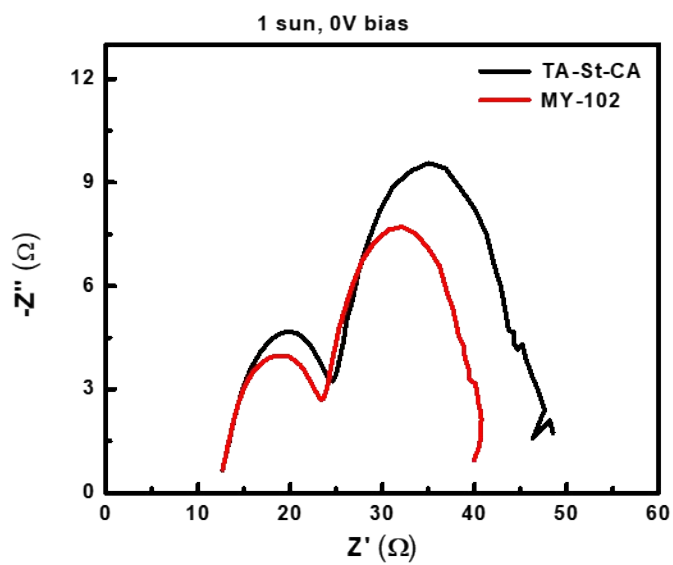


Fig. S10. Electrochemical Impedance Spectrum of MY-102 at 1 sun radiation.