Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information

p/n-Polarity of thiophene oligomers in photovoltaic cells: Role of molecular *vs* supramolecular properties

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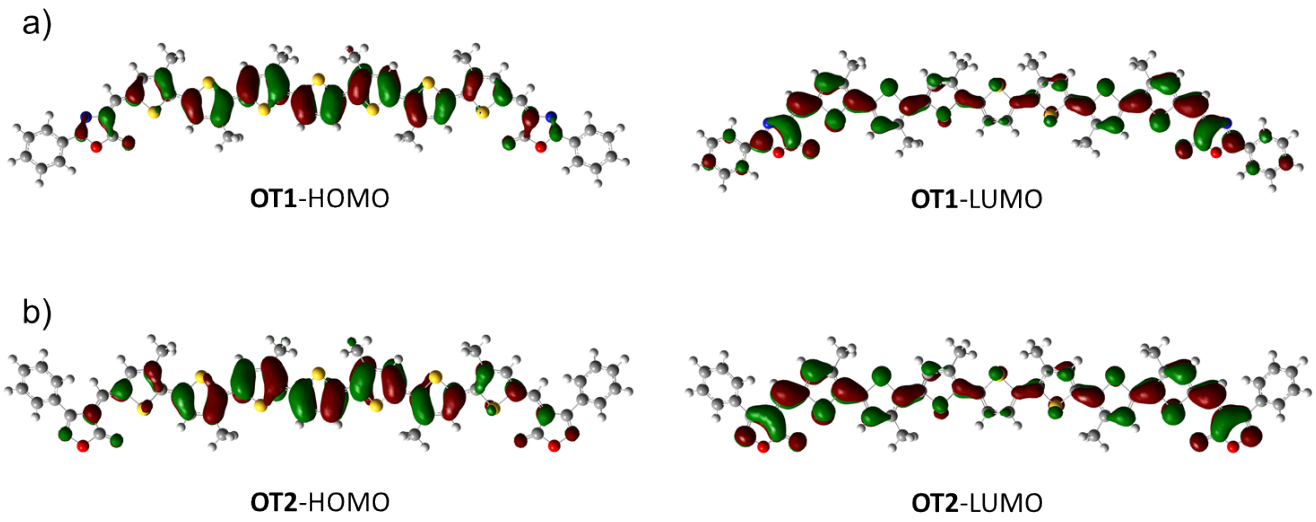

Fig. S1 HOMO and LUMO distribution of a) **OT1** and b) **OT2** obtained by density functional theory calculation with B3LYP 6-31G(d,p).

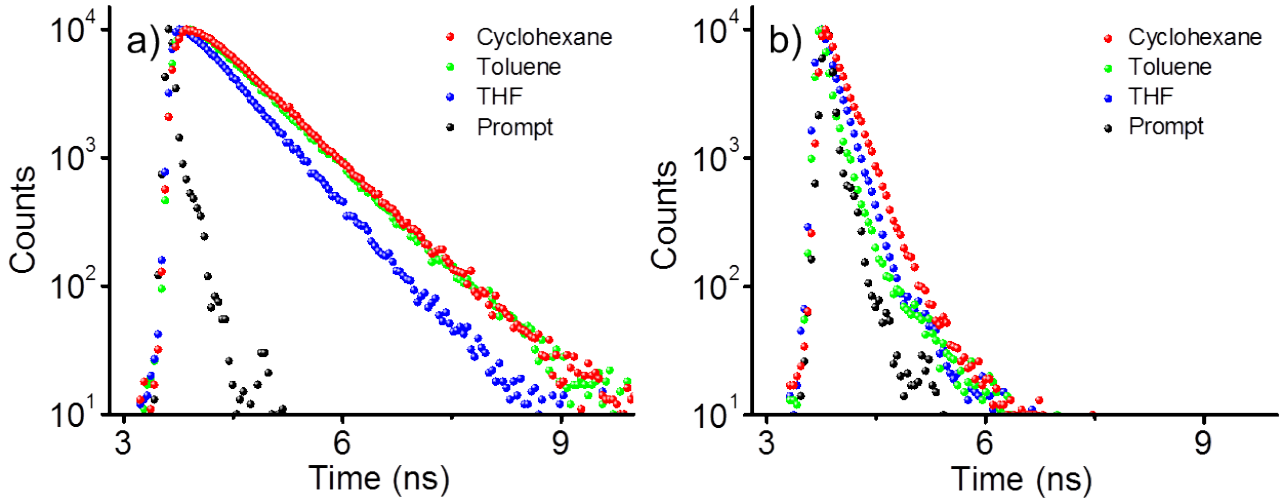

Fig. S2 Fluorescence decay profiles of a) **OT1** and b) **OT2** in different solvents. ($c = 1 \times 10^{-5}$ M, $l = 1$ cm, $\lambda_{ex} = 440$ nm).

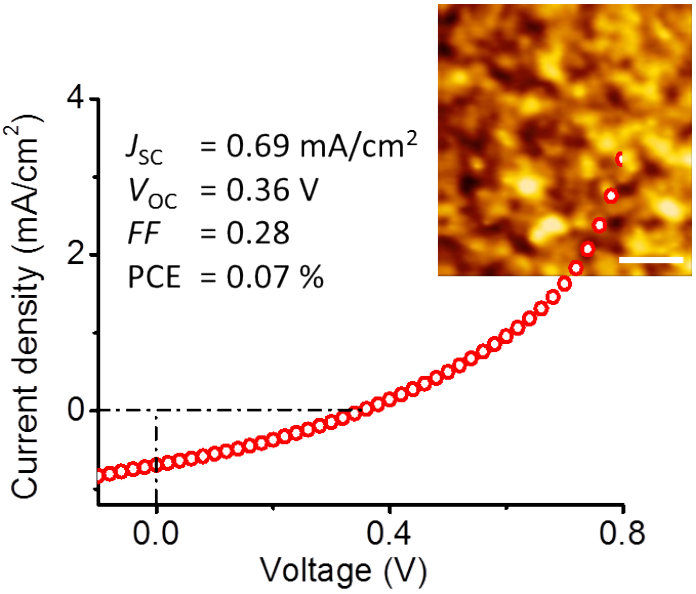

Fig. S3 *J–V* characteristics of photovoltaic devices fabricated from a solution of **OT1**:P3HT (1:1 blend) in chlorobenzene (device structure: glass/ITO/ZnO/BHJ/MoOx/Ag). AFM height images of the corresponding active layer is shown in the inset (The scale bar corresponds to 500 nm).