Supporting Information

Diketopyrrolopyrrole Based Organic Semiconductors with Different Numbers of Thiophene Units: Symmetry Tuning Effect on Electronic Devices

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Figure S1. $^1$H NMR spectrum of DPP13T.

Figure S2. $^{13}$C NMR spectrum of DPP13T.

Figure S3. HRMS spectrum of DPP13T.
Figure S4. $^1$H NMR spectrum of DPP23T.

Figure S5. $^{13}$C NMR spectrum of DPP23T.

Figure S6. HRMS spectrum of DPP23T.
Figure S7. $^1$H NMR spectrum of DPP33T.

Figure S8. $^{13}$C NMR spectrum of DPP33T.

Figure S9. HRMS spectrum of DPP33T.
Figure S10. Optical microscope images of spin-coated DPP13T (a), DPP23T (b) and DPP33T (c) films.

Figure S11. Mobility values for spin-coated DPP13T, DPP23T and DPP33T based bottom contact transistors.

Table S1 Comparison of OFET mobility for small molecules based on DPP.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Device Configuration</th>
<th>$\mu_e$ cm$^2$ V$^{-1}$ s$^{-1}$</th>
<th>$\mu_h$ cm$^2$ V$^{-1}$ s$^{-1}$</th>
<th>Ref.</th>
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<td>DPP13T</td>
<td>BG/BC</td>
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<td>$1.18 \times 10^{-4}$</td>
<td>This study</td>
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<td>Ph(DPPT$_2$)$_2$</td>
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Reference


S2 B. Lim, H. Sun and Y.-Y. Noh, Dyes Pigm., 2017, 142, 17.


