Supporting Information

Naphthobisthiazole Diimide-Based n-Type Polymer Semiconductors: Synthesis, π-stacking, Field-Effect Charge Transport, and All-Polymer Solar Cells

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Figure S1. 1H NMR (500 MHz) spectrum of NBTDI dibromide (3) in CDCl₃.
Figure S2. $^{13}$C NMR (125 MHz) spectrum of NBTDI dibromide (3) in CDCl$_3$.

Figure S3. $^1$H NMR (500 MHz) spectrum of PNBTDIP in CDCl$_3$. 
**Figure S4.** $^1$H NMR (500 MHz) spectrum of PNBTDIT in CDCl$_3$.

**Figure S5.** $^1$H NMR (500 MHz) spectrum of PNBTDIV in CDCl$_3$. 
**Figure S6.** TGA thermograms of PNBTDIs in N₂ obtained at a 10 °C min⁻¹ heating rate.

**Figure S7.** DSC scans of PNBTDIs at a heating/cooling rate of 10 °C min⁻¹ in nitrogen.
Figure S8. Output (a & c) and transfer (b & d) characteristics of PNBTDIT and PNBTDIP OFETs.
Figure S9. AFM topographical images (5 x 5 µm²) of the surfaces of poly(naphthobisthiazole diimide)s and PSEHTT:PNBTDI blends: (a) PNBTDIP, (b) PNBTDIT, and (c) PNBTDIV; and their corresponding blend images of (d) PSEHTT:PNBTDIP, (e) PSEHTT:PNBTDIT and (f) PSEHTT:PNBTDIV.