Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa, and Christine K. Luscombe

Table of Contents

Cyclic voltammetry reduction curves of polymer series S2-S3
OFET transfer curves S4-S5
DFT calculated reduced-geometry structures of PNDI-0Boc, PNDI-1Th, PNDI-1BocL, and PNDI-2BocL S6
PNDI-1BocL isomeric structures S7
$^1$H and $^{13}$C spectra for monomers and polymers S8-S22
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Cyclic voltammetry reduction curves of PNDI-xBoc series:
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Figure S1. A) Cyclic voltammograms of PNDA-0Boc, B) PNDA-1Boc, C) PNDA-1BocL, D) PNDA-2Boc, E) PNDA-2BocL. "Cyclic voltammograms vs. Ag/AgNO₃. [From text: cyclic voltammetry was carried out in a standard three-electrode electrochemical cell employed with a platinum working electrode and a Ag/AgNO₃ reference electrode while using ferrocene as an internal standard. The energy level referenced for ferrocene compared to vacuum was 4.8 eV.]"
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

OFET transfer curves of PNDI-xTh series:
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Figure S2. A) Transfer curve of PNDI-0Boc at a constant source-drain voltage of +100V plotted with the square root of current as a function of gate voltage, B) corresponding curve of PNDI-1Boc, C) corresponding curve of PNDI-1BocL, D) corresponding curve of PNDI-2Boc, E) corresponding curve of PNDI-2BocL.
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Figure S3. DFT calculated reduced-geometry structures of PNDI-0Boc, PNDI-1Th, PNDI-1BocL, and PNDI-2BocL. 
PNDI-0Boc (Top left), PNDI-1Th (Top right), PNDI-1BocL (Bottom Left), and PNDI-2BocL (Bottom right).
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe

Figure S4. Graphical illustrations of the potential isomeric structures possible for PNDI-1BocL.
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications

Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications

Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications

Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe
Supporting information: Synthesis and characterization of solution-processible ladderized n-type naphthalene bisimide co-polymers for OFET applications
Matthew M. Durban, Peter D. Kazarinoff, Yukari Segawa and Christine K. Luscombe