SUPPLEMENTARY MATERIAL

Figure 1: Cyclic voltammogram of poly-2 (Qdeposited = 0.2 C/cm²) on carbon paper electrode in 1 M Et₄NBF₄, acetonitrile, at a scan rate of 100 mV/s. Growth conditions: 10 mM [2], 1 M Et₄NBF₄/ acetonitrile, 0.1 mA/cm².

Figure 2: Cyclic voltammogram of poly-2 (Qdeposited = 0.2 C/cm²) on carbon paper electrode in 1 M Et₄NBF₄, acetonitrile, for an extended potential range. Scan rate 100 mV/s. Growth conditions: 10 mM [2], 1 M Et₄NBF₄/ acetonitrile, 0.1 mA/cm².

Figure 3: Cyclic voltammogram of poly-4 (Qdeposited = 0.2 C/cm²) on carbon paper electrode in 1 M Et₄NBF₄, acetonitrile, at a scan rate of 100 mV/s. Growth conditions: 90 mM [4], 1 M Et₄NBF₄/ acetonitrile, 0.1 mA/cm².

Figure 4: Geometry optimization of E-α-[(2-thienyl)methylene]-2-thiopheneacetonitrile, 1, monomer from PM3 calculations performed with WinMOPAC Ver 2.0 software.

Figure 5: Geometry optimization of E-α-[(3-methyl-2-thienyl)methylene]-2-thiopheneacetonitrile, 2, monomer from PM3 calculations performed with WinMOPAC Ver 2.0 software.

Figure 6: Geometry optimization of E-α-[(2-furanyl)methylene]-2-thiopheneacetonitrile, 3, monomer from PM3 calculations performed with WinMOPAC Ver 2.0 software.

Figure 7: Geometry optimization of E-α-[(2-thienyl)methylene]-2-(3-methylthiophene)acetonitrile, 4, monomer from PM3 calculations performed with WinMOPAC Ver 2.0 software.

Figure 8: Geometry optimization of E-α-(2-thienylmethylene)-2-furanacetonitrile, 5, monomer from PM3 calculations performed with WinMOPAC Ver 2.0 software.
SUPPLEMENTARY MATERIAL

Figure 1
Figure 3
Figure 4
Heat of Formation = 110.81757 kcal/mol

Figure 5

Heat of Formation = 82.89100 kcal/mol

Figure 6
Figure 7

Figure 8