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## Electronic Supporting Information

### Small band gap copolymers based on furan and diketopyrrolopyrrole for field-effect transistors and photovoltaic cells

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Dago M. de Leeuw,<sup>b</sup> and René A. J. Janssen\*<sup>a</sup>

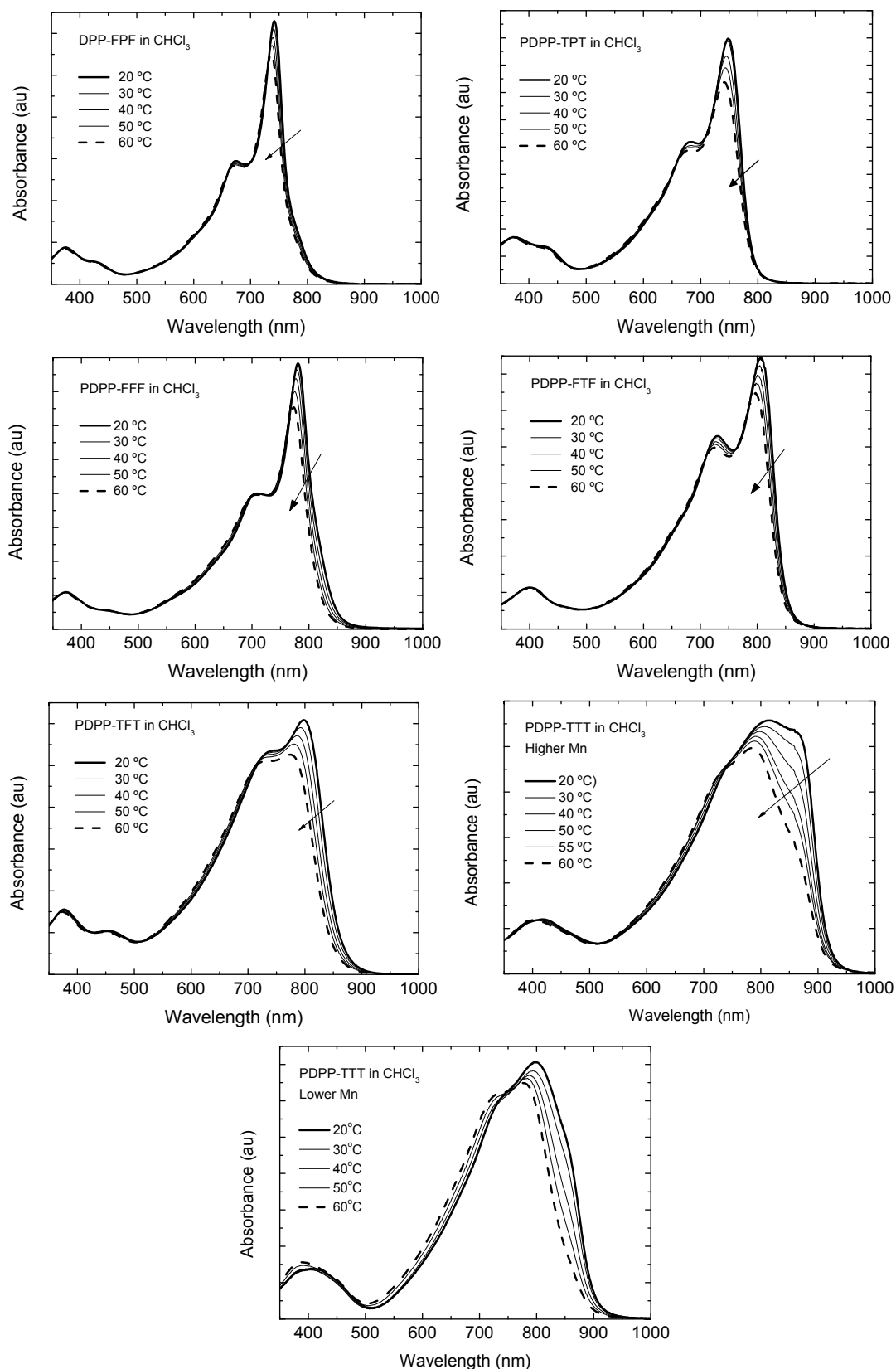
**Table S1.** Onset of UV-vis absorption of the DPP-XYX polymers in oDCB and CHCl<sub>3</sub> solution at different temperatures.

Polymer	oDCB	CHCl <sub>3</sub>	
	20 °C	20 °C	60 °C
	<i>E<sub>g</sub></i> (eV)	<i>E<sub>g</sub></i> (eV)	<i>E<sub>g</sub></i> (eV)
<b>FPF</b>	1.52	1.52	1.55
<b>TPT</b>	<i>a</i>	1.56	1.58
<b>FFF</b>	1.43	1.47	1.50
<b>FTF</b>	1.45	1.46	1.48
<b>TFT</b>	1.43	1.44	1.47
<b>TTT</b> low <i>M<sub>n</sub></i>	1.39	1.38	1.43
<b>TTT</b> high <i>M<sub>n</sub></i>	1.37	1.35	1.36

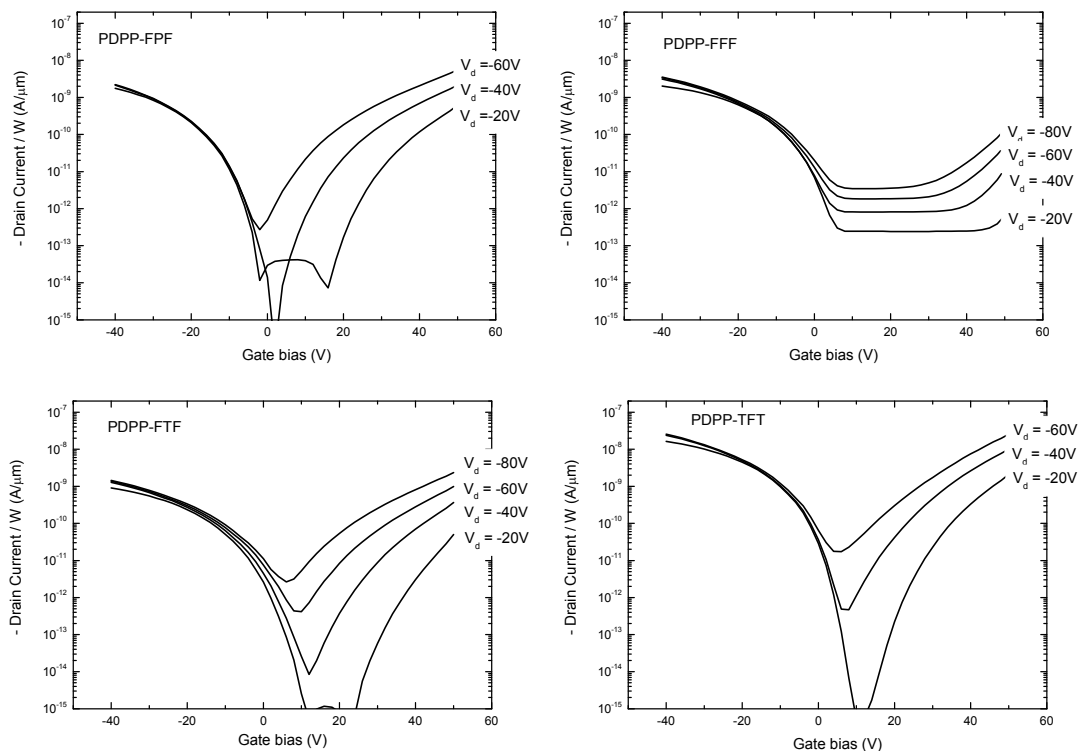
<sup>a</sup> Not soluble

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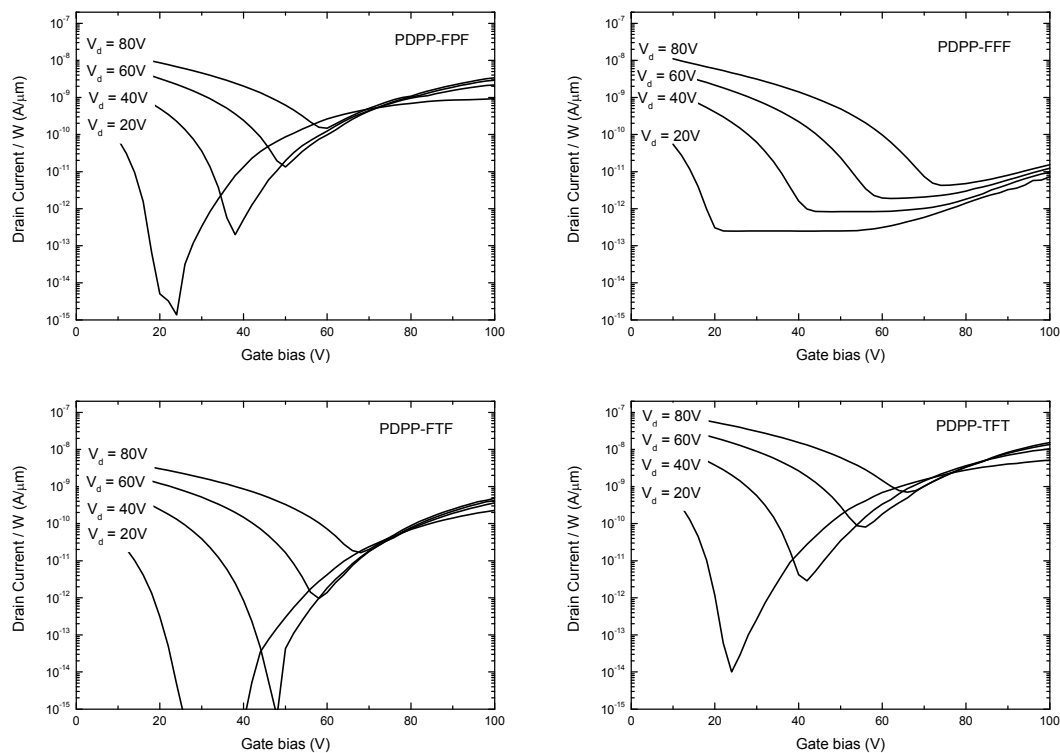
<sup>b</sup> Philips Research Laboratories, High Tech Campus 4, 5656 AE Eindhoven, The Netherlands.



**Figure S1.** Variable temperature UV-vis-nearIR absorption spectra recorded in  $\text{CHCl}_3$  solution between 20 and 60 °C for the six DPP-XYX polymers.



**Figure S2.** *p*-Type transfer curves of FETs made with the four furan based DPP-XYX polymers. Drain current is normalized with respect to the channel length for direct comparison.



**Figure S3.** *n*-Type transfer curves of FETs made with the four furan based DPP-XYX polymers. Drain current is normalized with respect to the channel length for direct comparison.