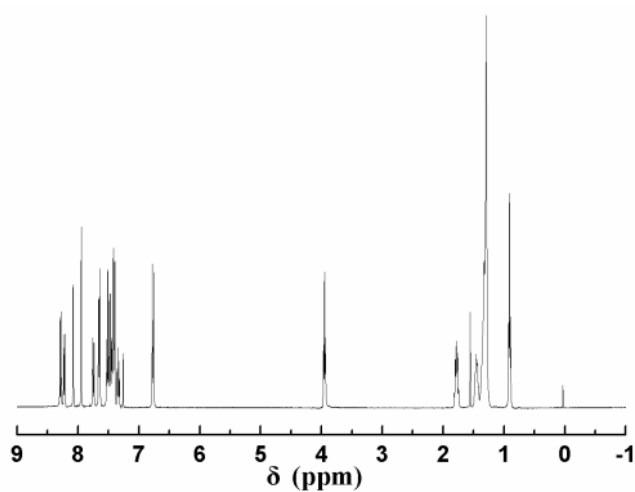


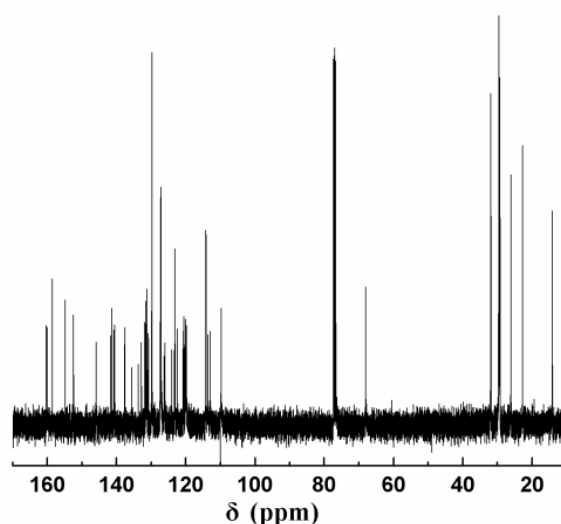
## Electronic Supplementary Information

# Effects of Pyrazine Derivatives and Substituted Positions on the Photoelectric Properties and Electro-memory Performance of D-A-D Series compounds

Xuejing Song, Lingqian Kong, Hongmei Du, Xiangyu Li, Hanlin Feng, Jinsheng Zhao and Yu Xie

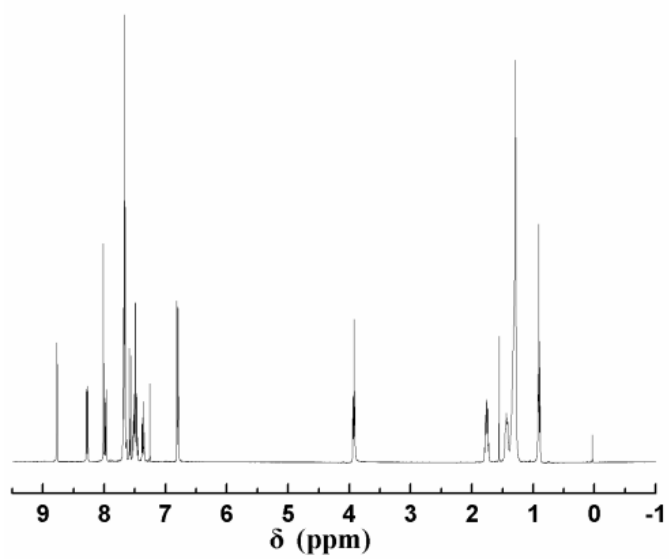


(a)

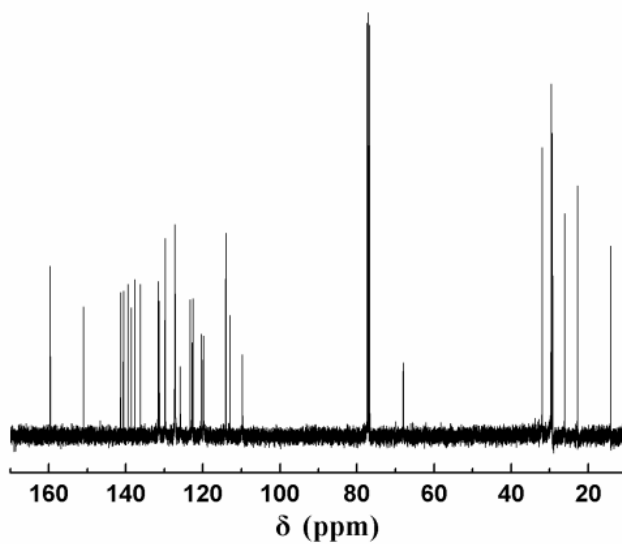


(b)

**Figure S1.** (a) <sup>1</sup>H NMR spectrum of BPC-2DPx in CDCl<sub>3</sub> solution (b) <sup>13</sup>C NMR spectrum of BPC-2DPx in CDCl<sub>3</sub> solution.

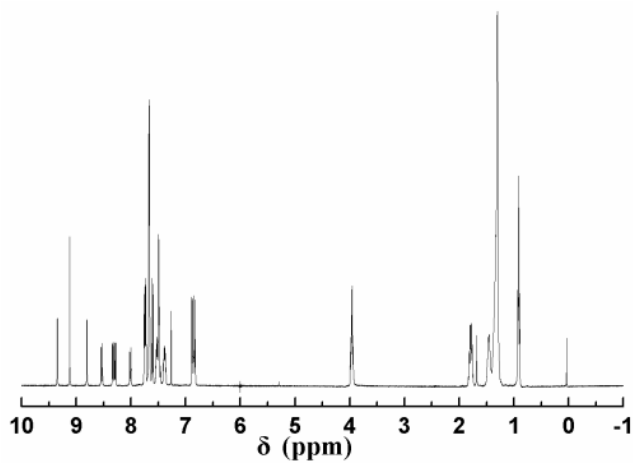


(a)

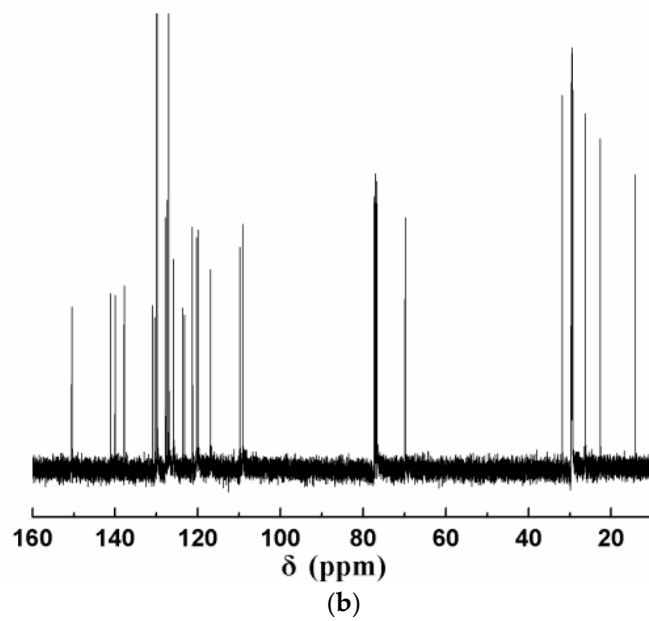


(b)

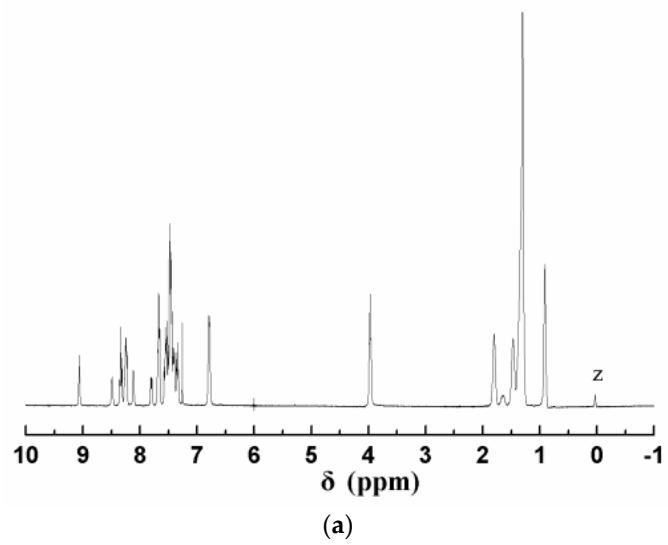
**Figure S2.** (a) <sup>1</sup>H NMR spectrum of BPC-3DPx in CDCl<sub>3</sub> solution, (b) <sup>13</sup>C NMR spectrum of BPC-3DPx in CDCl<sub>3</sub> solution.

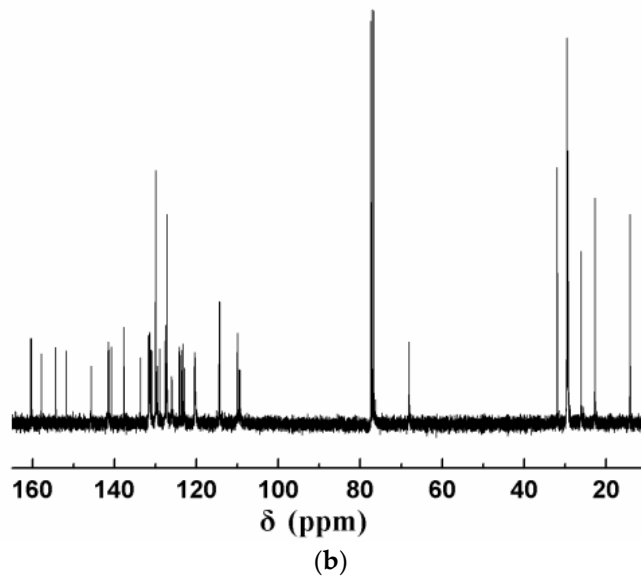


(a)

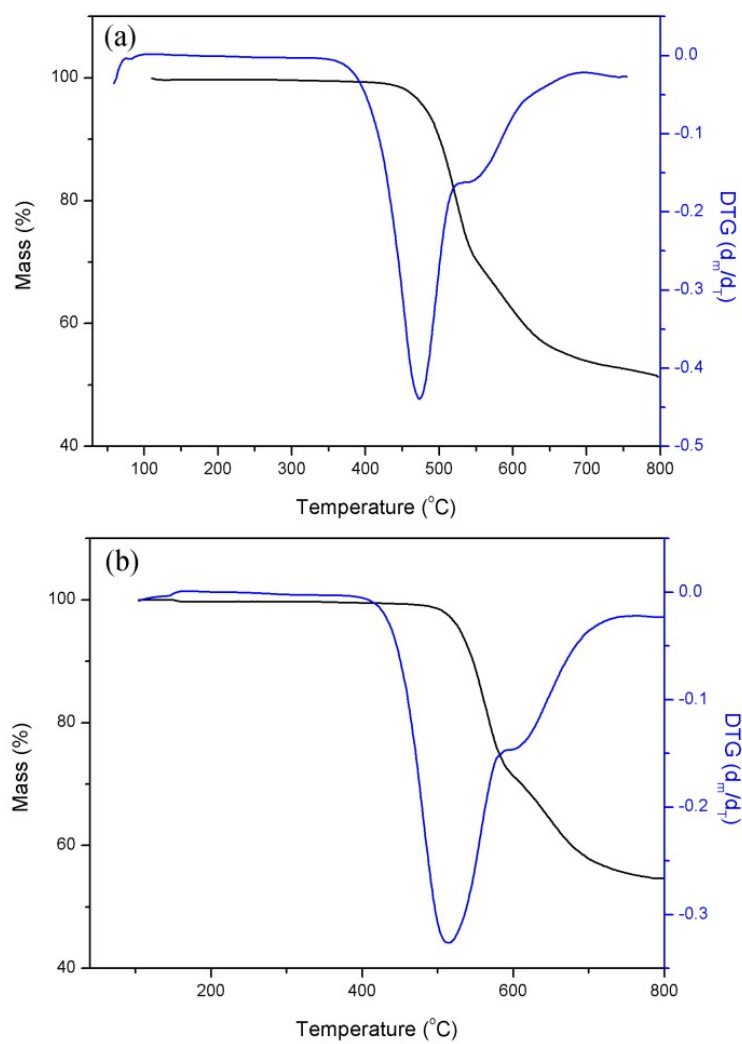


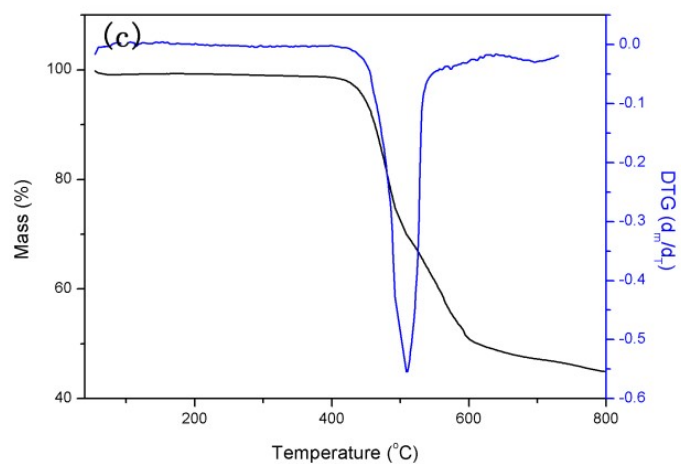
**Figure S3.** (a) <sup>1</sup>H NMR spectrum of BPC-2DPP in CDCl<sub>3</sub> solution, (b) <sup>13</sup>C NMR spectrum of BPC-2DPP in CDCl<sub>3</sub> solution.



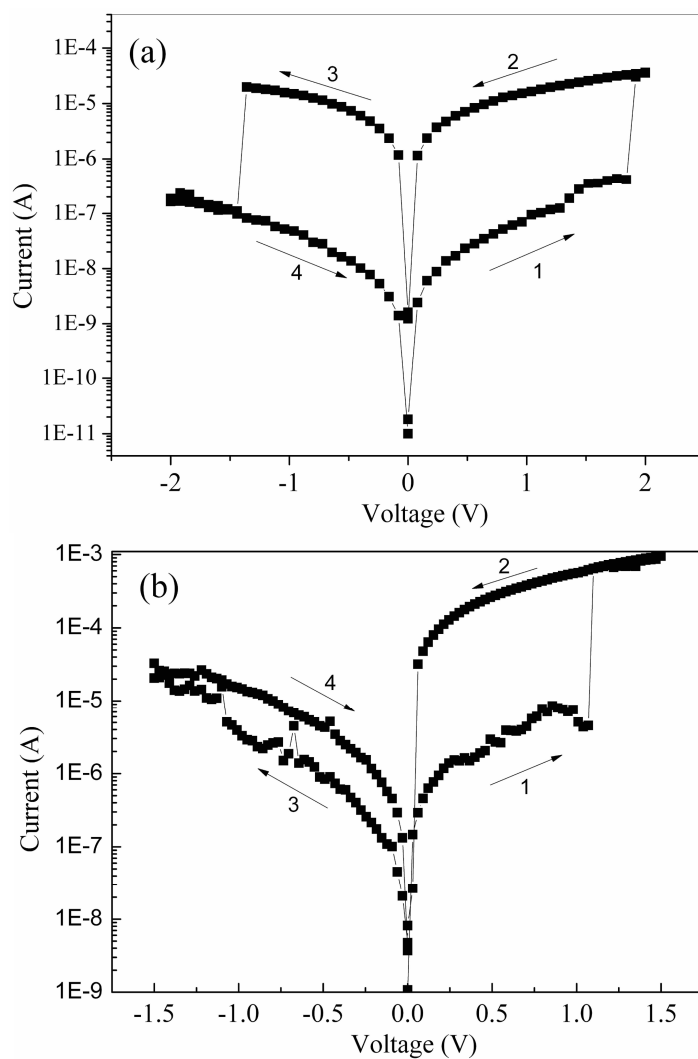


**Figure S4.** (a)  $^1\text{H}$  NMR spectrum of BPC-3DPP in  $\text{CDCl}_3$  solution, (b)  $^{13}\text{C}$  NMR spectrum of BPC-3DPP in  $\text{CDCl}_3$  solution.





**Figure S5.** (a) TGA curves of BPC-3DPx, (b) TGA curves of BPC-2DPP, (c) TGA curves of BPC-3DPP.



**Figure S6.** Current-voltage (I-V) characteristics of (a) ITO/BPC-3DPx/Al and (b) ITO/BPC-3DPP/Al memory devices.