Supporting information

Multi-Functional Polyimides Containing Tetraphenyl Fluorene Moieties: Fluorescence and Resistive Switching Behavior

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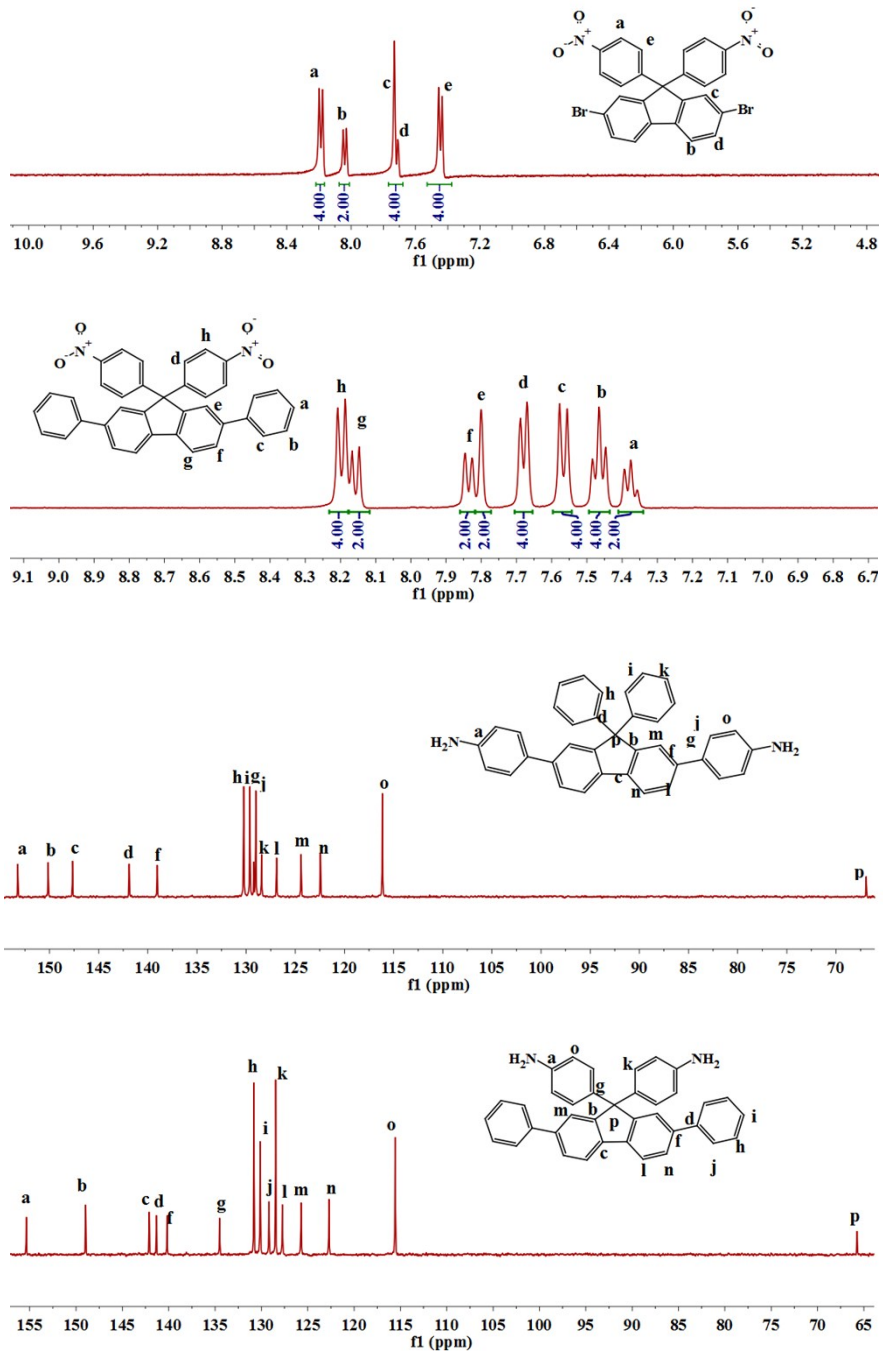


Fig. S1. ^{1}H NMR and ^{13}C NMR spectra of the intermediates and the diamines

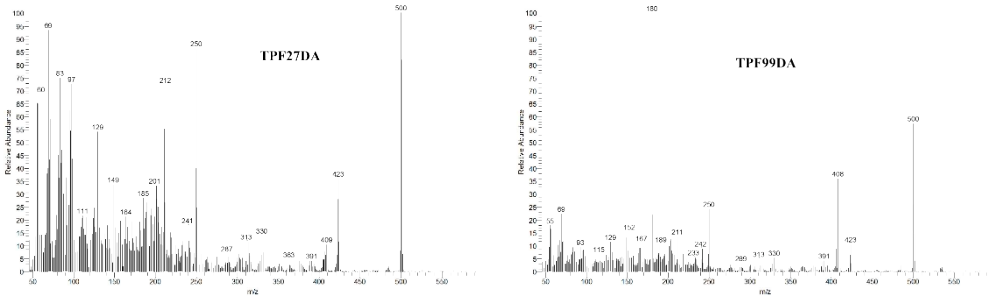


Fig. S2. The Mass Spectrometry of **TPF27DA** and **TPF99DA**.

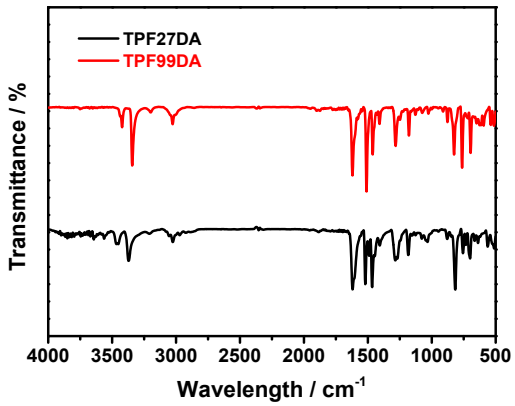


Fig. S3. FT-IR spectroscopy for the **TPF27DA** and **TPF99DA**.

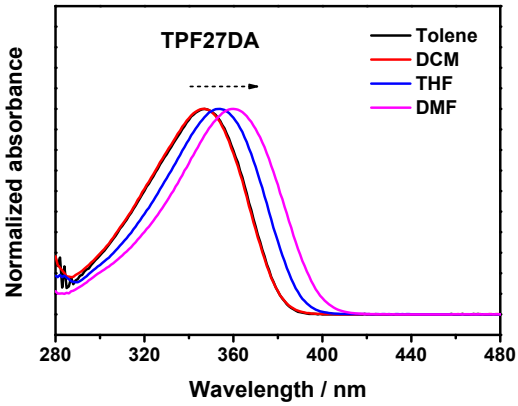


Fig. S4. UV-vis. absorption spectroscopy of **TPF27DA** in solvents

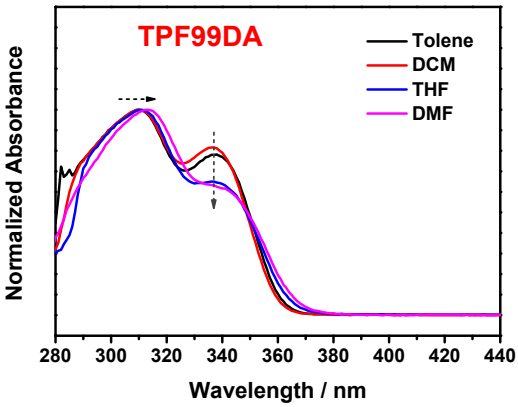


Fig. S5. UV-vis. absorption spectroscopy of **TPF99DA** in solvents

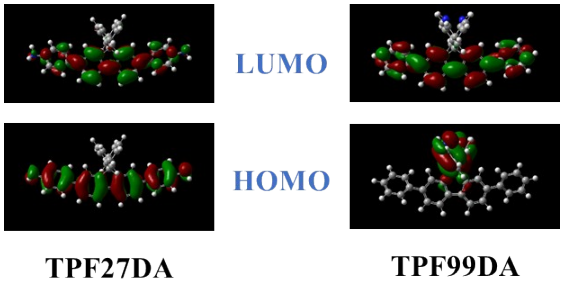


Fig. S6. The frontier orbitals for TPF27DA and TPF99DA.

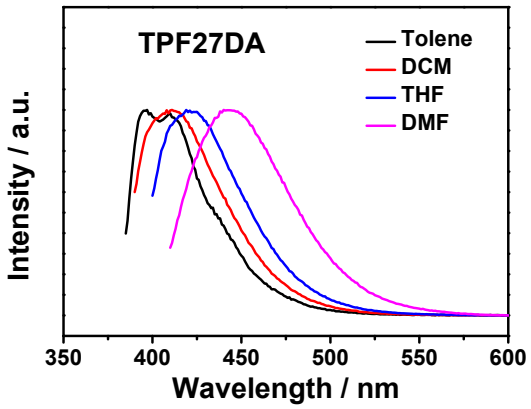


Fig. S7. PL spectra of the TPF27DA in solutions

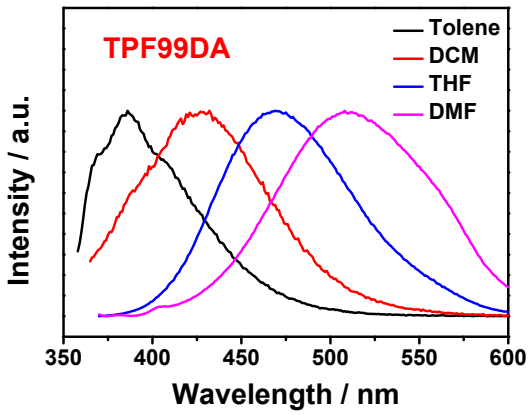


Fig. S8. PL spectra of the TPF99DA in solutions

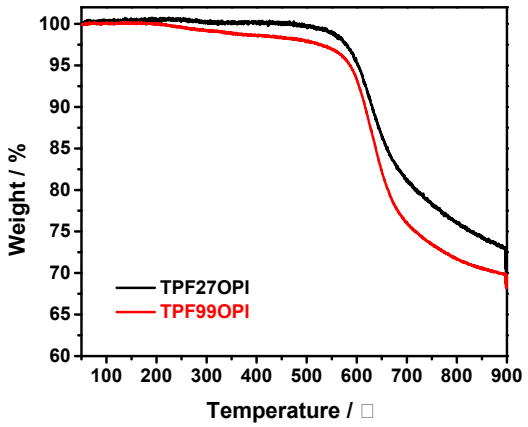


Fig. S9. TGA for the PIs.

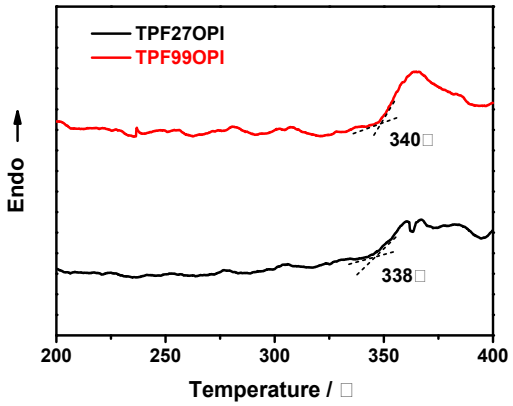


Fig. S10. DSC for the PIs.

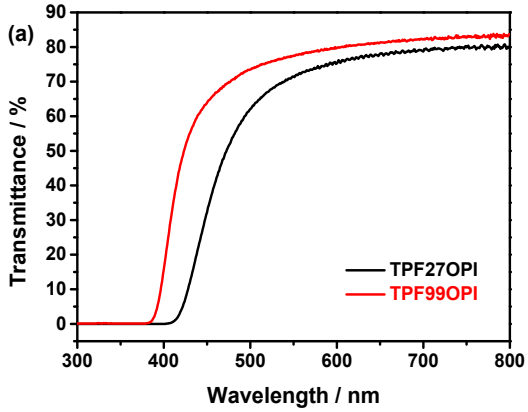


Fig. S11. Transmittance for the PIs.

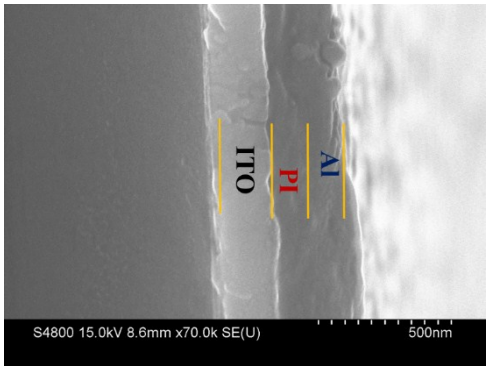


Fig.S12. The SEM picture of the memory device.

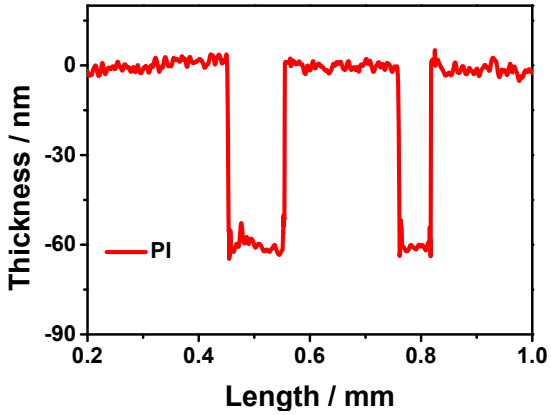


Fig. S13. The thickness of the polyimide on the device.

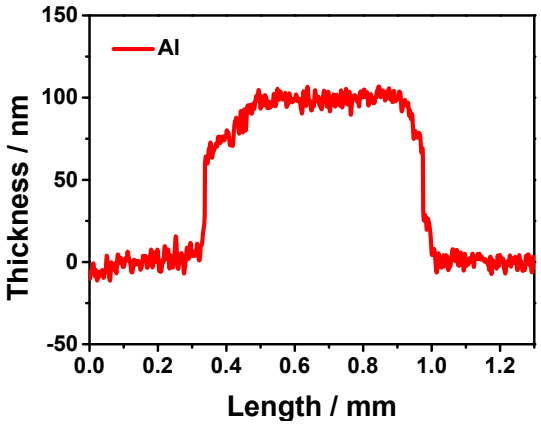


Fig. S14. The thickness of the Al electrode on the device.

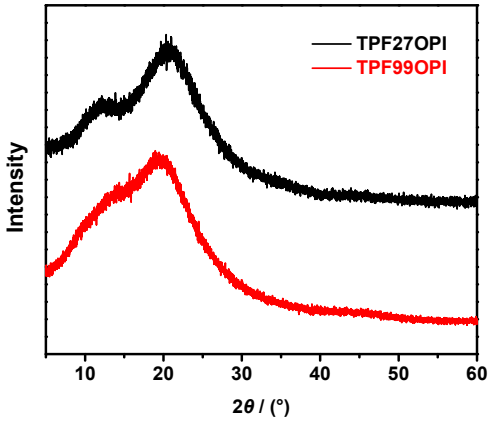
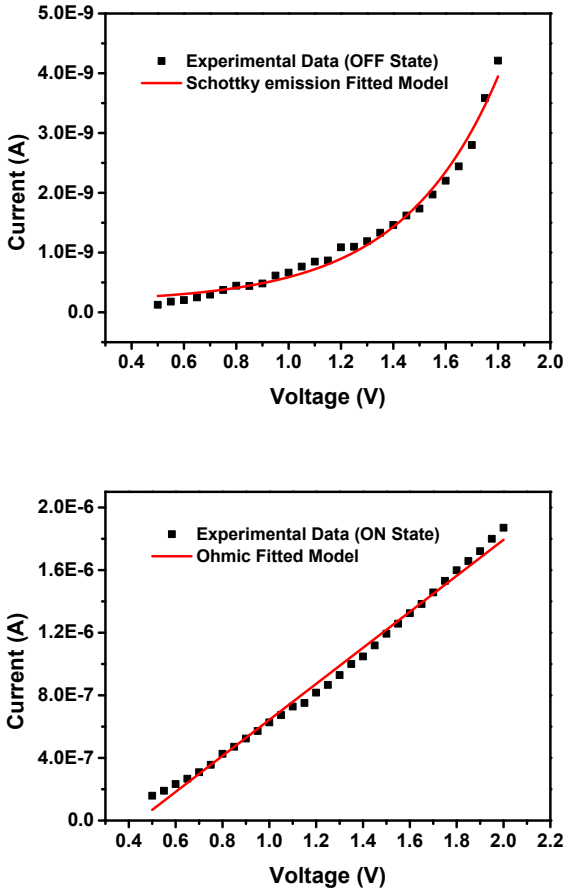


Fig. S15. XRD diffraction for the polyimides



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