

Triggering DRAM/SRAM memory behaviors by single atom substitution to alter molecular planarity

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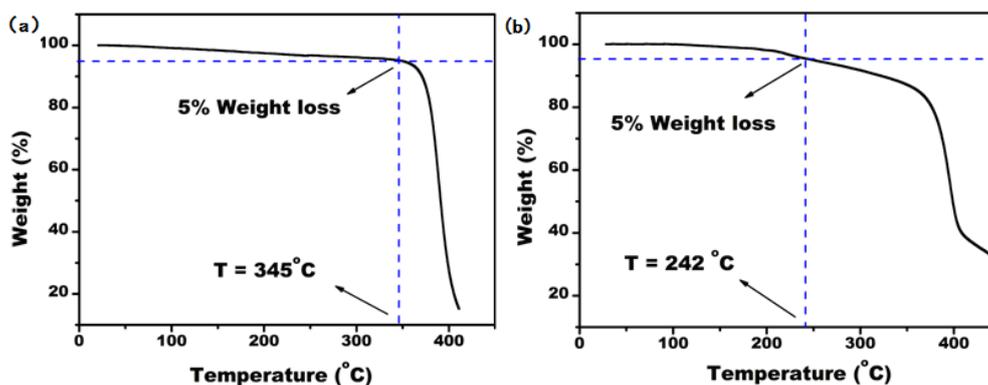


Fig. S1 TGA plots of ID(BT)2 and ID(BF)2, with a heating rate of 10 °C/min. (a) ID(BT)2; (b) ID(BF)2.

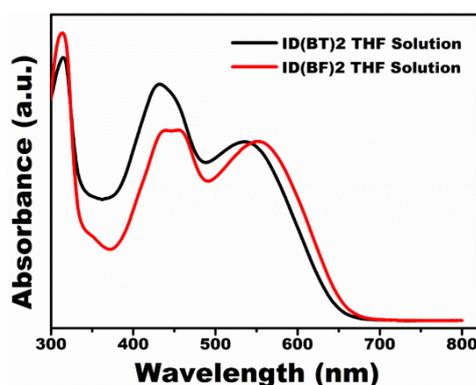


Fig. S2 The UV-vis spectra of ID(BT)2 and ID(BF)2 in THF solution.

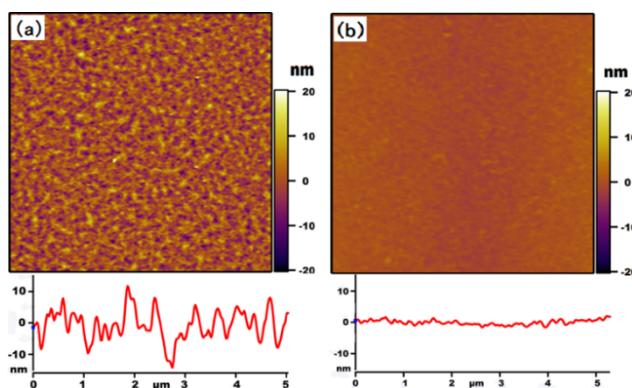


Fig. S3 Tapping-mode (5 μm×5 μm) AFM topography of ID(BT)2 and ID(BF)2 films on ITO substrates, respectively. (a) ID(BT)2; (b) ID(BF)2.

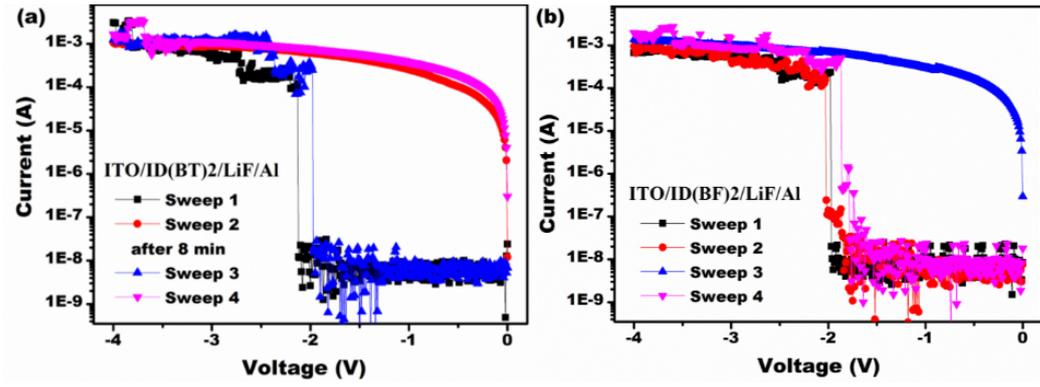


Fig. S4 Typical Current-Voltage (I-V) characteristics of the ITO/ID(BT)2/LiF/Al ID(BT) memory device (a), and ITO/ID(BF)2/LiF/Al memory device (b).

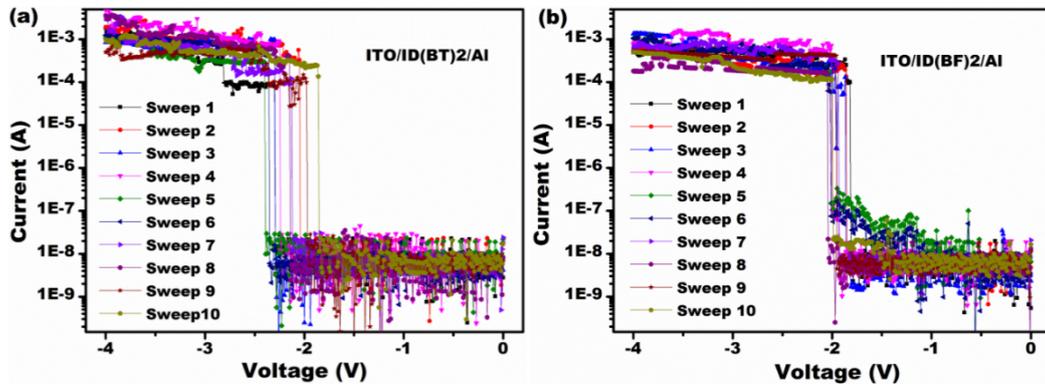
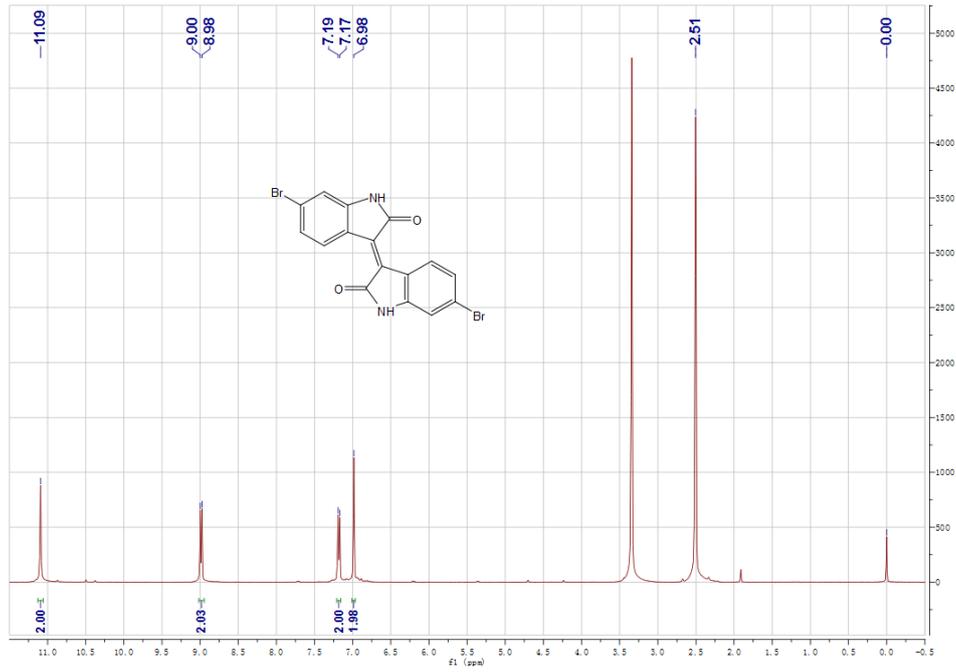
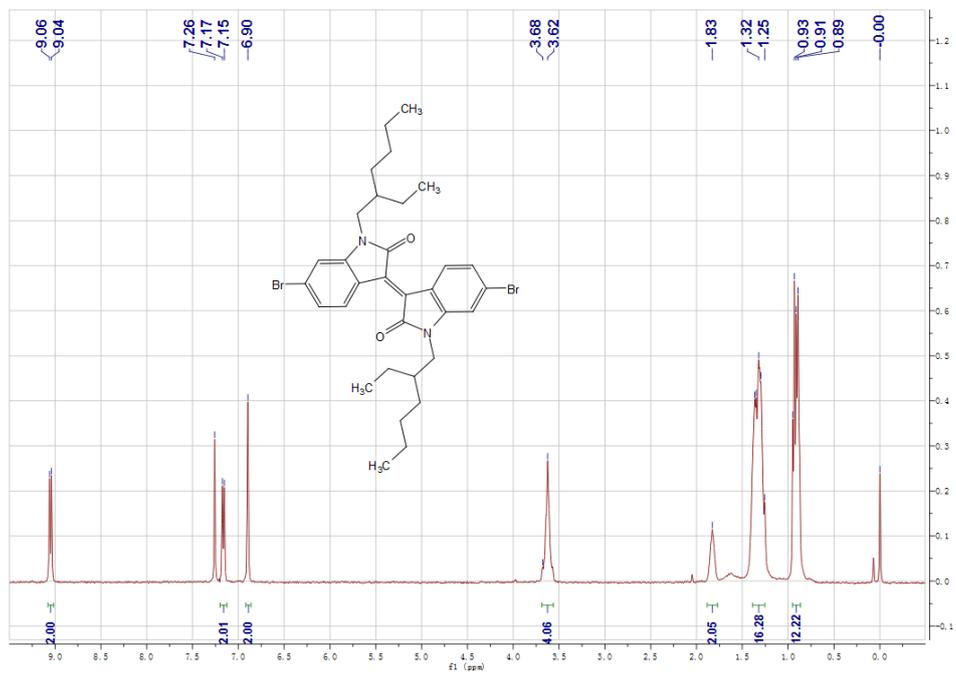


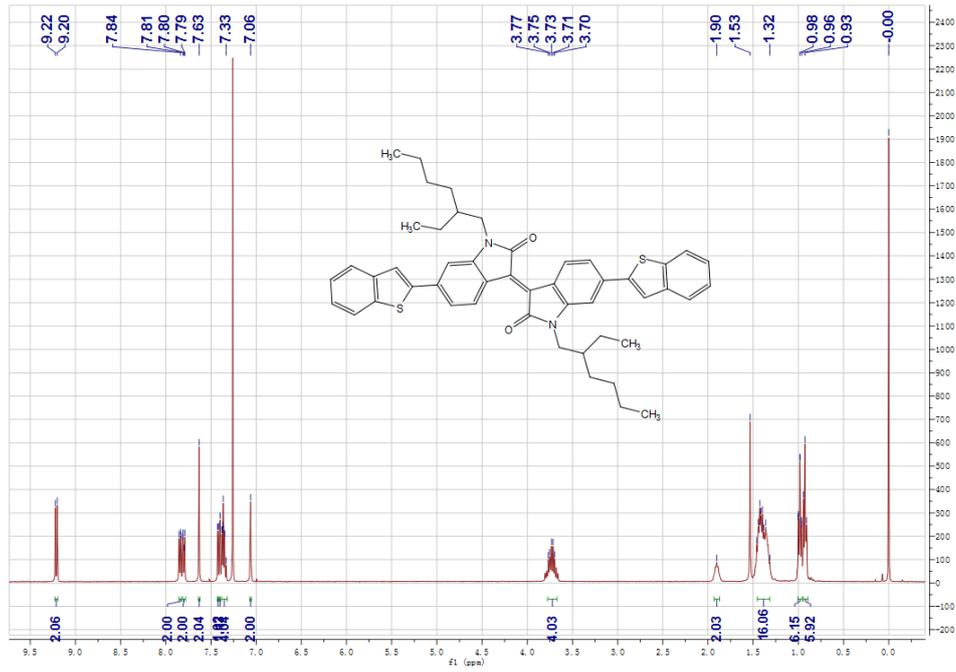
Fig. S5 The I-V characterized of ID(BT)2 and ID(BF)2 based memory devices were repeatedly measured. (a) ID(BT), (b) ID(BF)2.



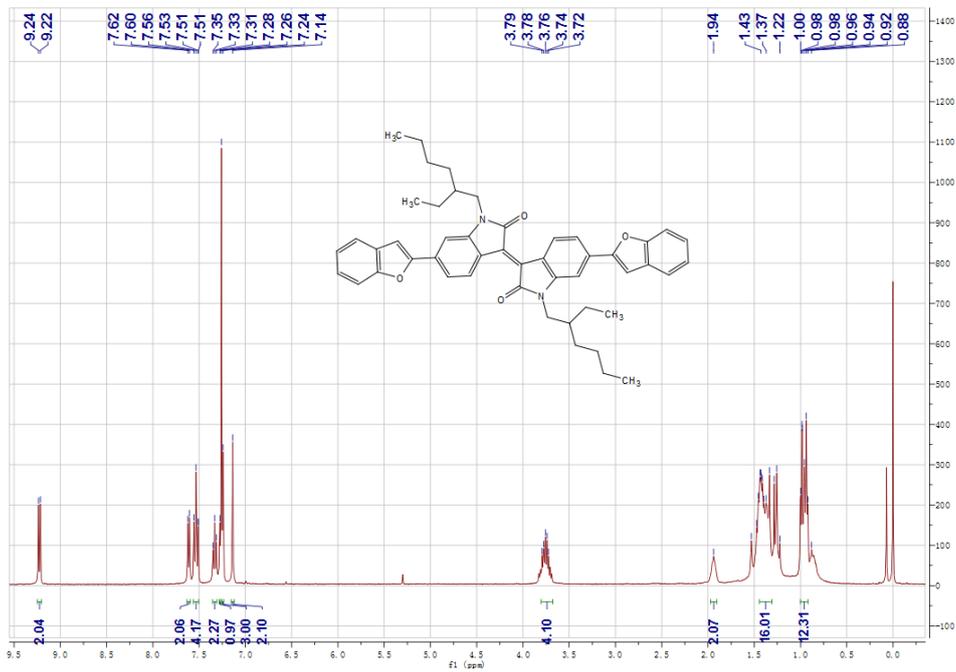
Compound 1



Compound 2



Compound 3a



Compound 3b