

## 1,8-萘酰亚胺衍生物的合成、表征及电存储性能

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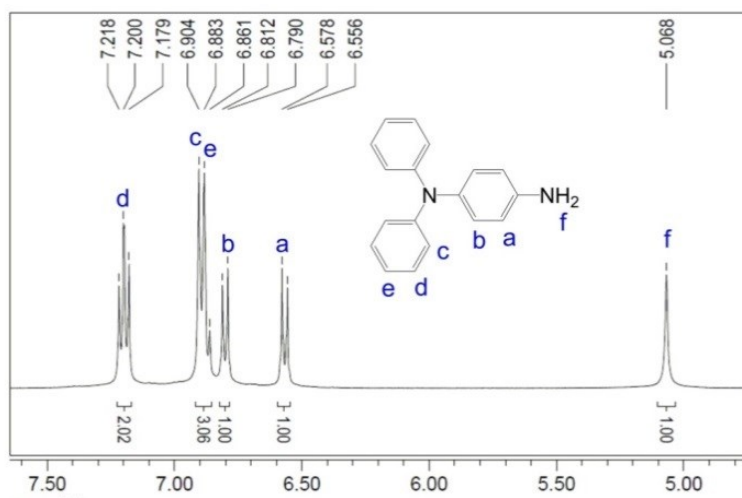
## Synthesis, Characterization and Memory Performance of Naphthalimides Containing Various Electron-Withdrawing Moieties

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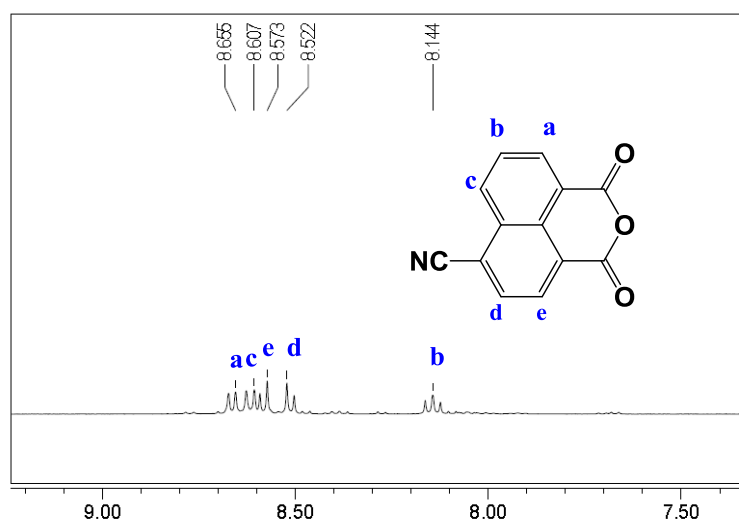
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**Fig.S1** The  $^1\text{H-NMR}$  spectrum of ATPA



**Fig.S2** The  $^1\text{H-NMR}$  spectrum of NACN

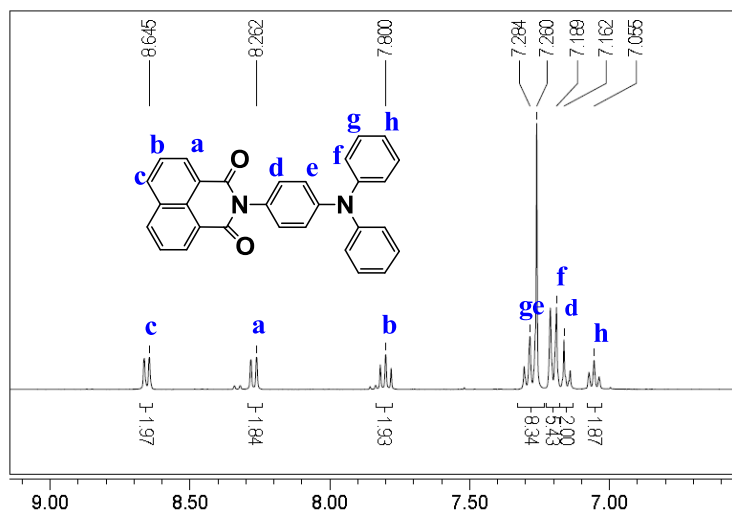


Fig.S3 The  $^1\text{H-NMR}$  spectrum of NA-ATPA

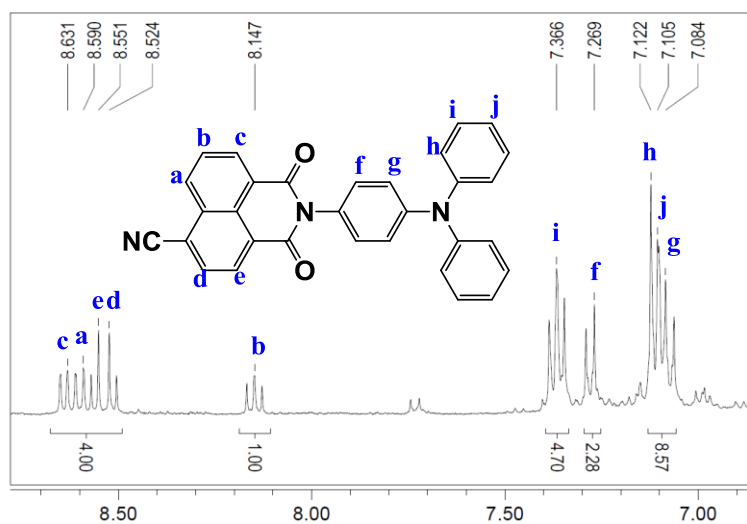


Fig.S4 The  $^1\text{H-NMR}$  spectrum of NA(CN)-ATPA

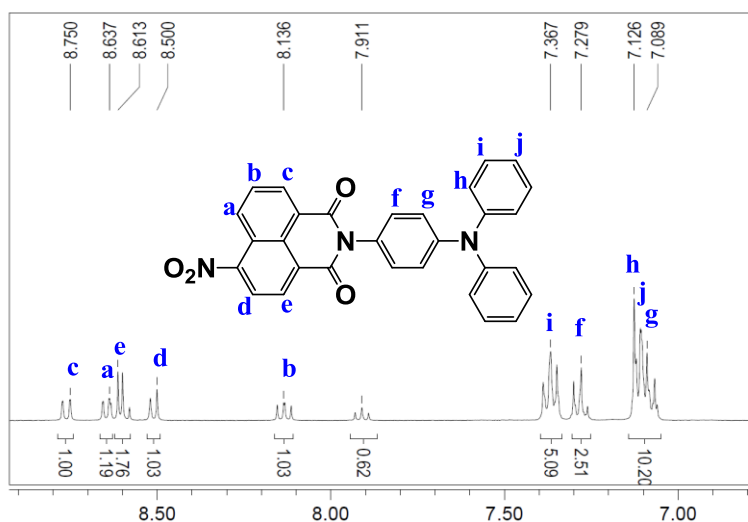


Fig.S5 The  $^1\text{H-NMR}$  spectrum of  $\text{NA}(\text{NO}_2)\text{-ATPA}$

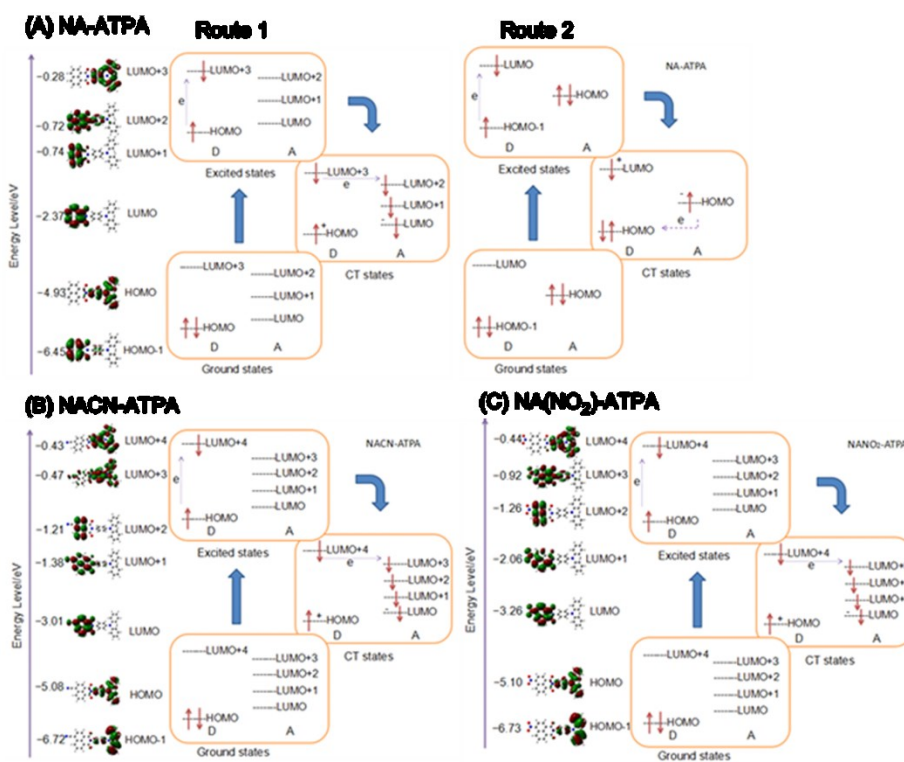
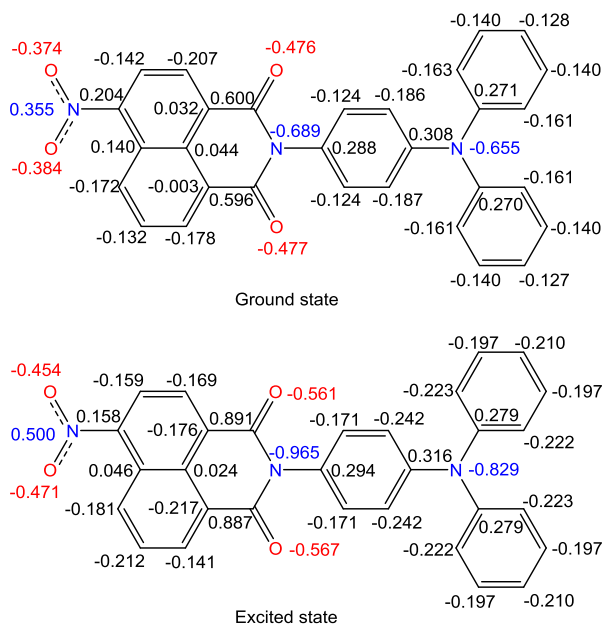


Fig.S6 Calculated molecular orbitals and the possible electronic transition processes occurring in (a)  $\text{NA-ATPA}$ , (b)  $\text{NA}(\text{CN})\text{-ATPA}$  and (c)  $\text{NA}(\text{NO}_2)\text{-ATPA}$ .





**Fig.S8 Mulliken population analysis of the NA-ATPA, NA(CN)-ATPA and NA(NO<sub>2</sub>)-ATPA at ground state and excited state**