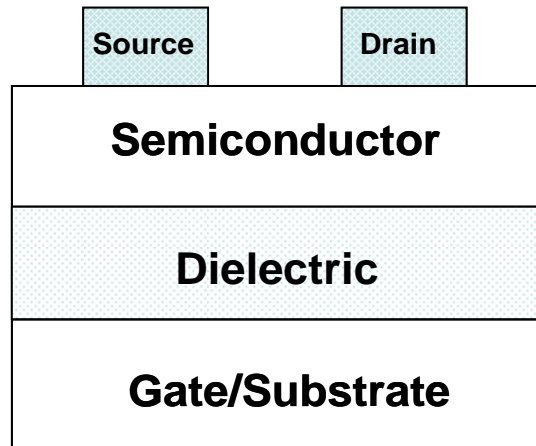


(a)



(b)

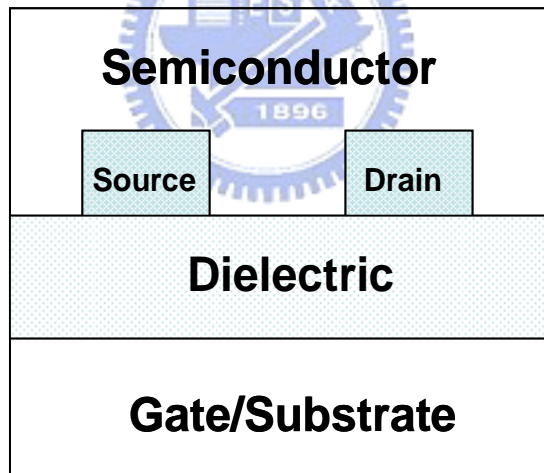
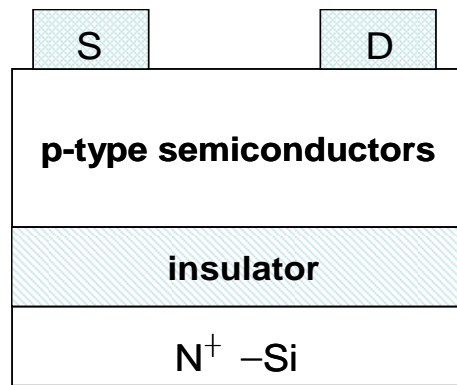
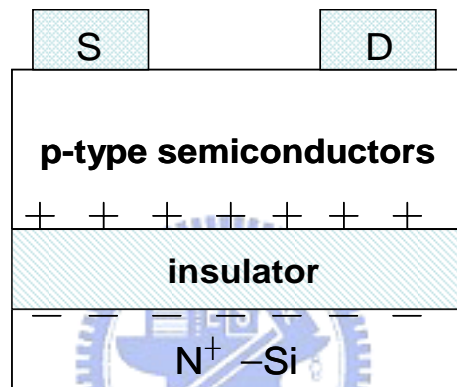


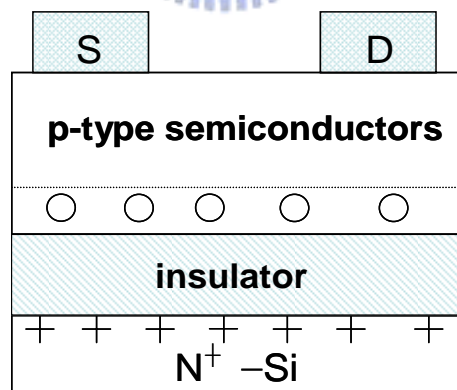
Fig. 2-1 OTFT device configurations. (a) Schematic cross section view of top contact device. (b) Schematic cross section view of bottom contact device.



(a) $V_G = V_D = 0$



(b) $V_G < V_D < 0$



(c) $V_G > 0, V_D = 0$

Fig. 2-2 Schematic of operation of OTFT, showing a p-type semiconductor: + indicates a positive charge in semiconductor; - indicate a negatively charge. (a) no-bias (b) accumulation mode (c) depletion mode.

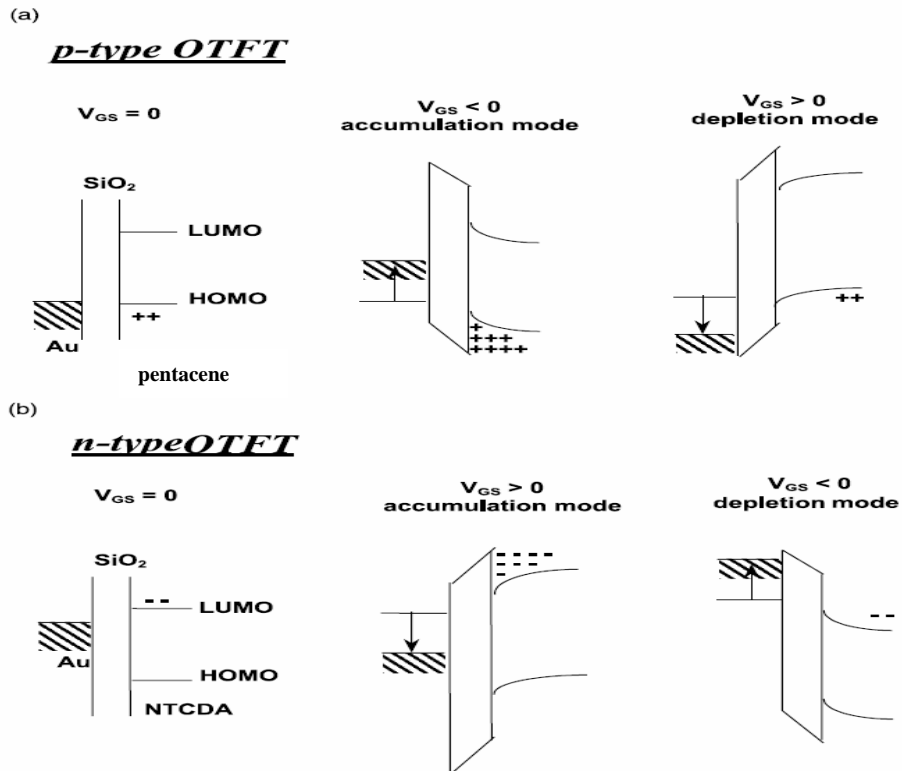


Fig. 2-3 Energy band diagrams (a) for a p-channel (pentacene) and (b) for a n-channel (NTCDA) OTFTs. The left side shows the devices at zero gate bias, while in the centre and in the right part the accumulation and depletion mode operation regimes are presented.

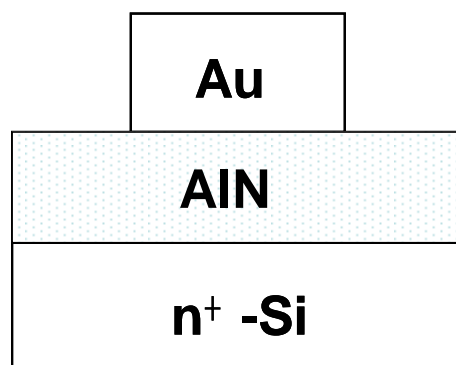


Fig. 3-1 Schematic cross section view of MIS-Au/AlN/Si capacitors structure.