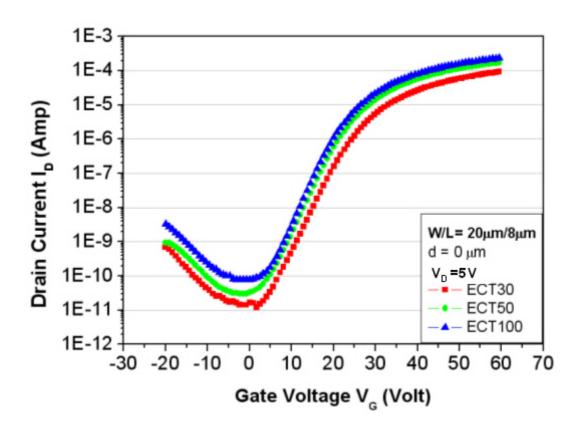
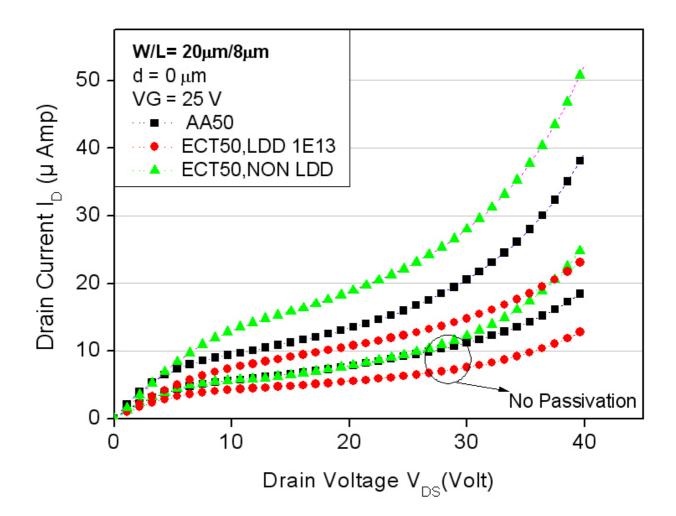


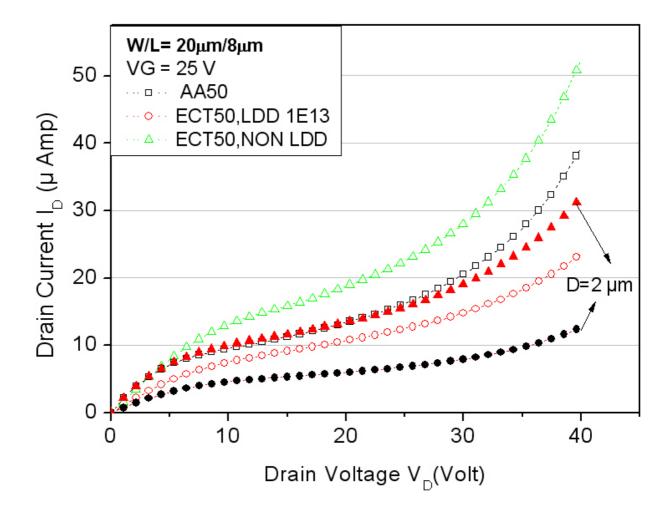
**Figure 2-20** Transfer characteristics for ECT TFT's before and after 1hr NH<sub>3</sub> plasma passivation



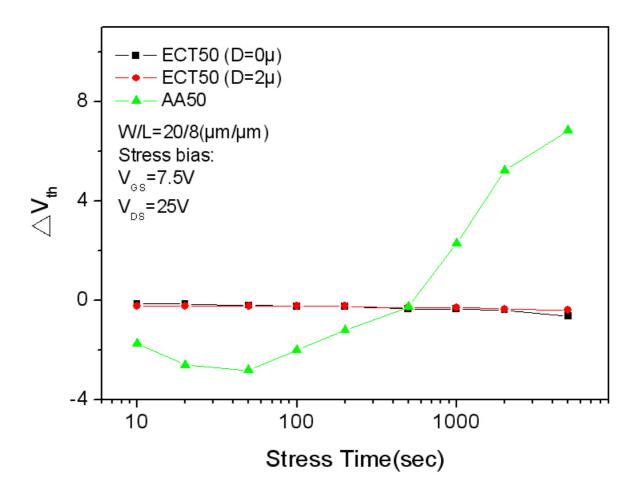
 $\label{eq:Figure 2-21} \textbf{I}_D - \textbf{V}_{GS} \text{ curves of ECT structure with}$  different thickness of the active layer after passivation



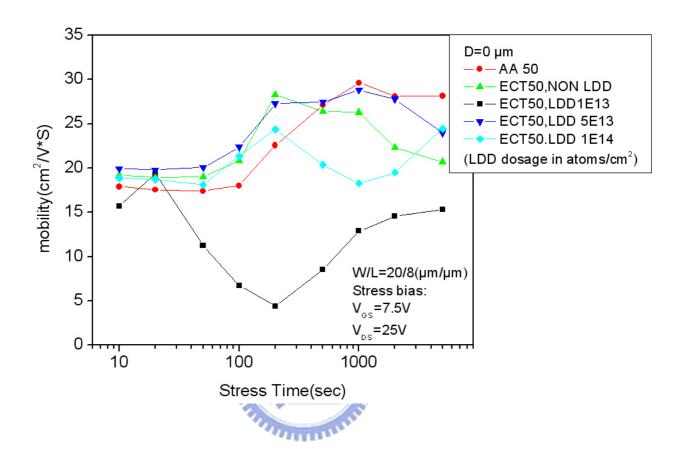
**Figure 2-22**  $I_D$  -  $V_D$  curves extracted at  $V_G$  = 25 V for various TFT samples, before and after 1hr NH<sub>3</sub> plasma passivation



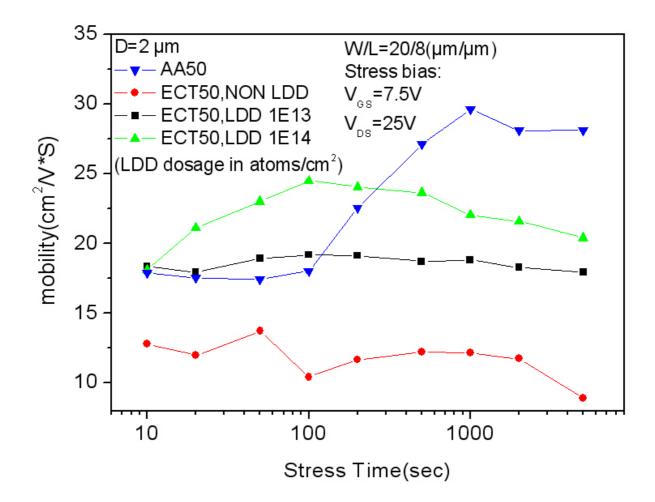
**Figure 2-23**  $I_D$  -  $V_D$  curves extracted at  $V_G$  = 25 V for various TFT samples: (a) W/L = 20/8, d = 0  $\mu$ m, and d = 2  $\mu$ m, after 1hr NH<sub>3</sub> plasma passivation



**Figure 2-24** Variation of threshold voltage at  $V_{DS}=5V$  under hot carrier stress. D is gate overlapping length.



**Figure 2-25** Variation of mobility at  $V_{DS}$ =0.1V under hot carrier stress.



**Figure 2-26** Variation of mobility at  $V_{DS}$ =0.1V under hot carrier stress.D(=2) is gate overlapping length.

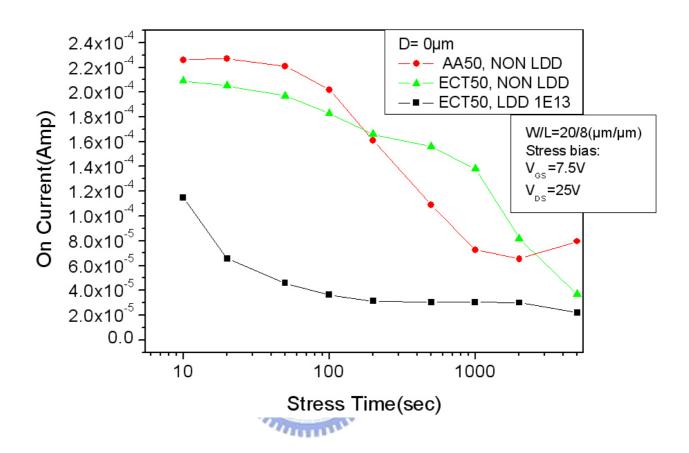
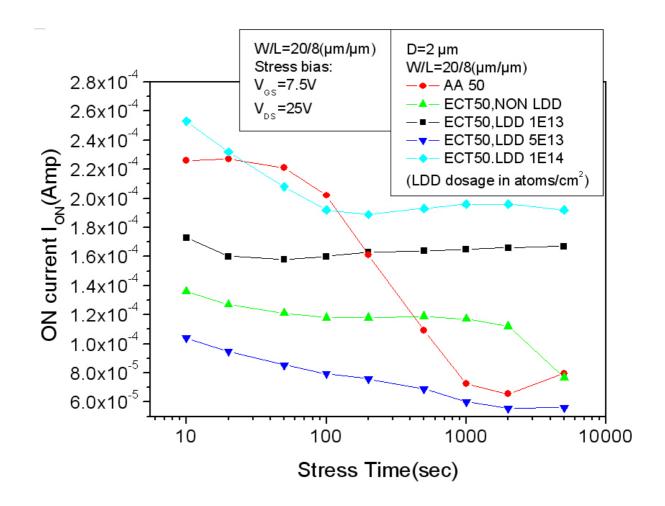


Figure 2-27 Variation of on current at  $V_{DS}$ =5V under hot carrier stress.



**Figure 2-28** Variation of on current at  $V_{DS}$ =5V under hot carrier stress. D(=2) is gate overlapping length.