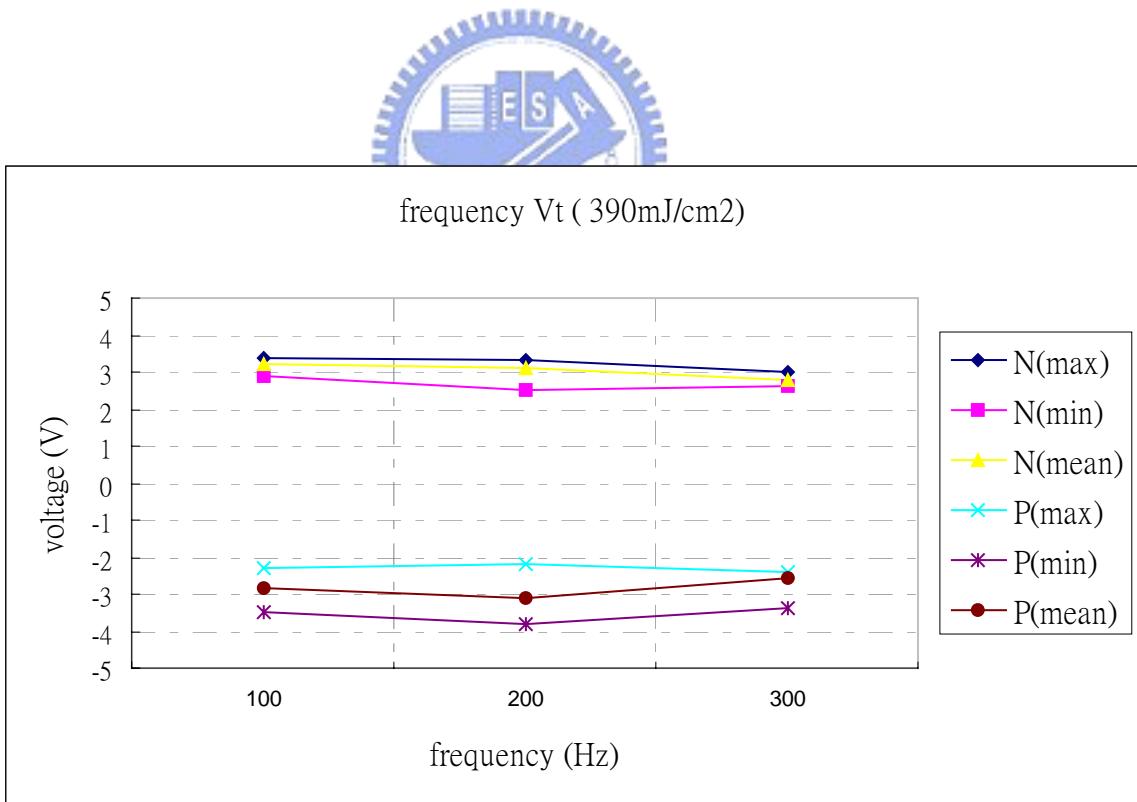
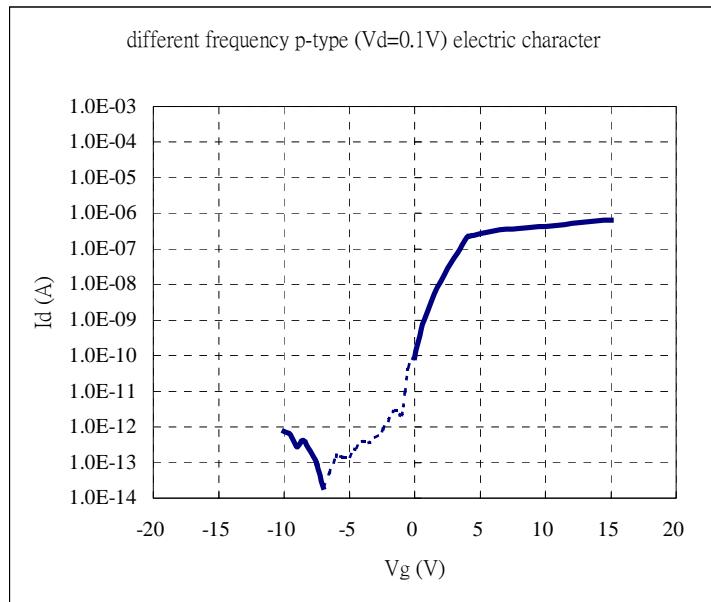


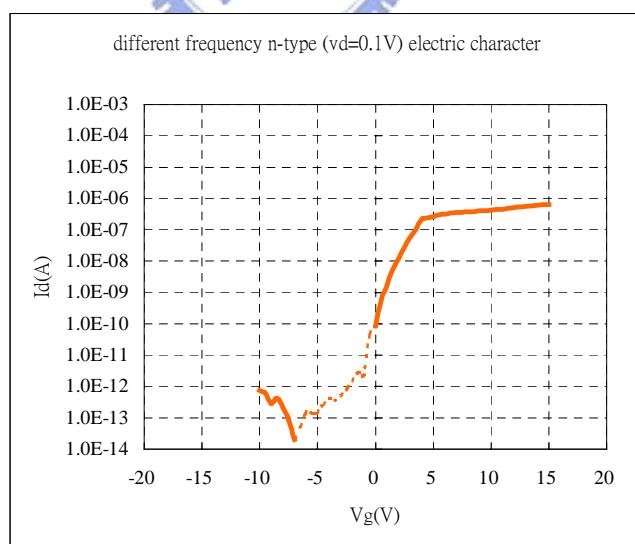
**Fig. 3-33** The mobility of different laser frequency with pre treatment clean of HF+O<sub>3</sub>



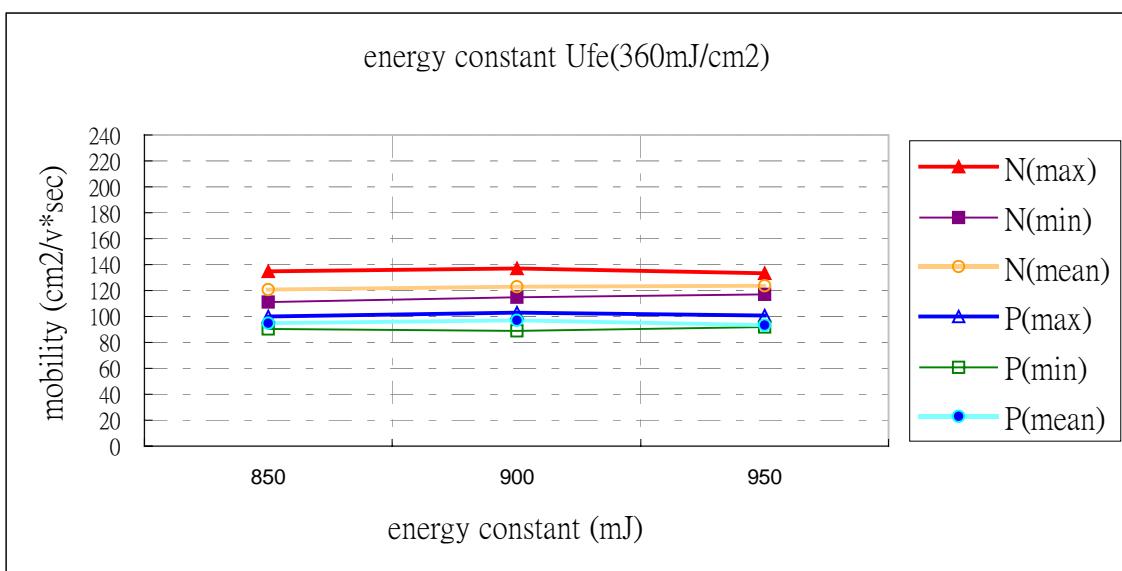
**Fig. 3-34** The thresholds voltage of different laser frequency with pre treatment clean of HF+O<sub>3</sub>



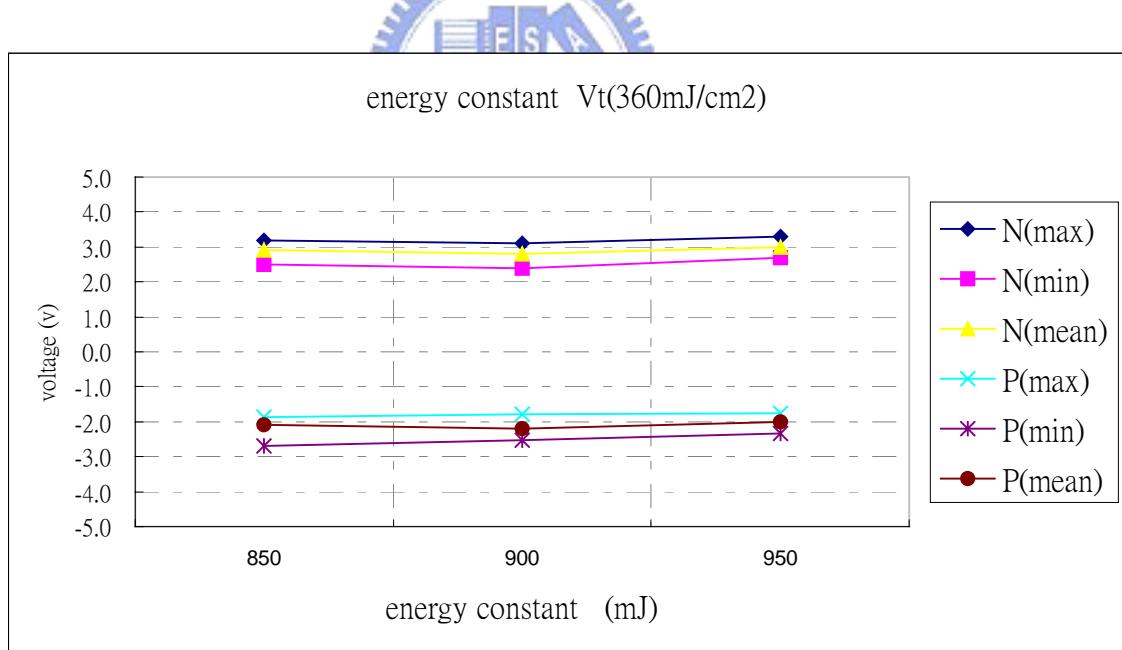
**Fig. 3-35** The transfer characteristics of p type ELA poly-Silicon TFTs. Laser frequency 300Hz, laser energy density 390mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> -2.8 V, U<sub>fe</sub> 97 cm<sup>2</sup>/V•sec, I<sub>off</sub> 2.93E-13A, SS 0.22 and on/off current ratio 6.1E+6



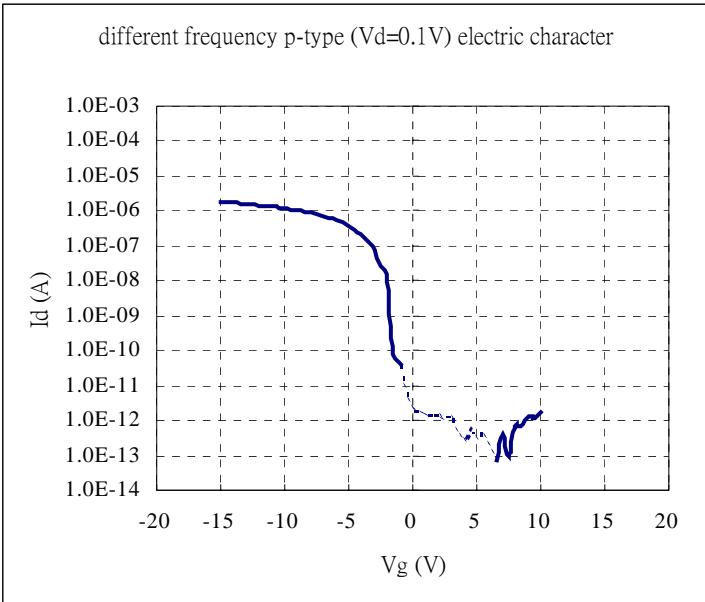
**Fig. 3-36** The transfer characteristics of n type ELA poly-Silicon TFTs. Laser frequency 300Hz, laser energy density 390mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> 3.0V, U<sub>fe</sub> 124 cm<sup>2</sup>/V•sec, I<sub>off</sub> 1.23E-13A, SS 0.62 and on/off current ratio 5.2E+6



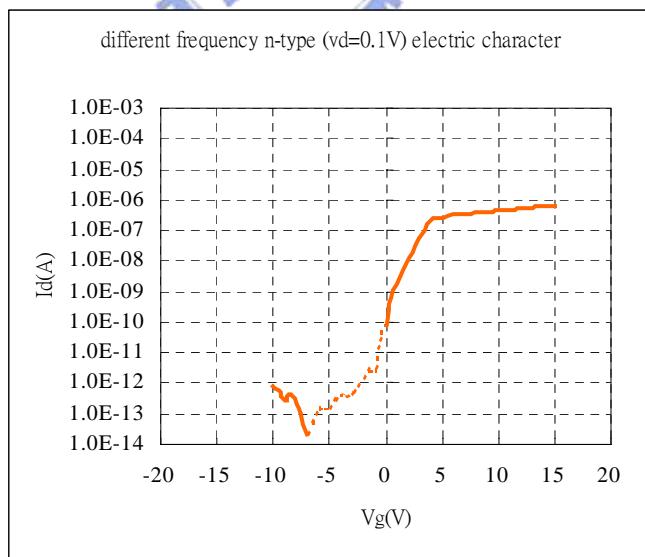
**Fig. 3-37** The mobility of different laser energy with pre treatment clean of HF+O<sub>3</sub>



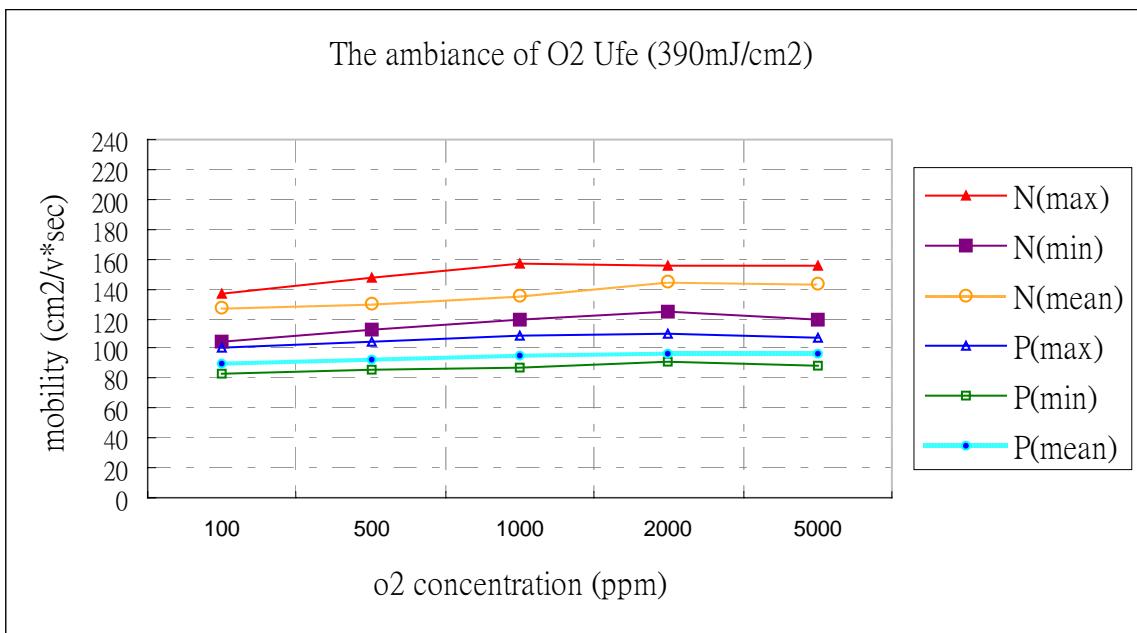
**Fig. 3-38** The thresholds voltage of laser energy with pre treatment clean of HF+O<sub>3</sub>



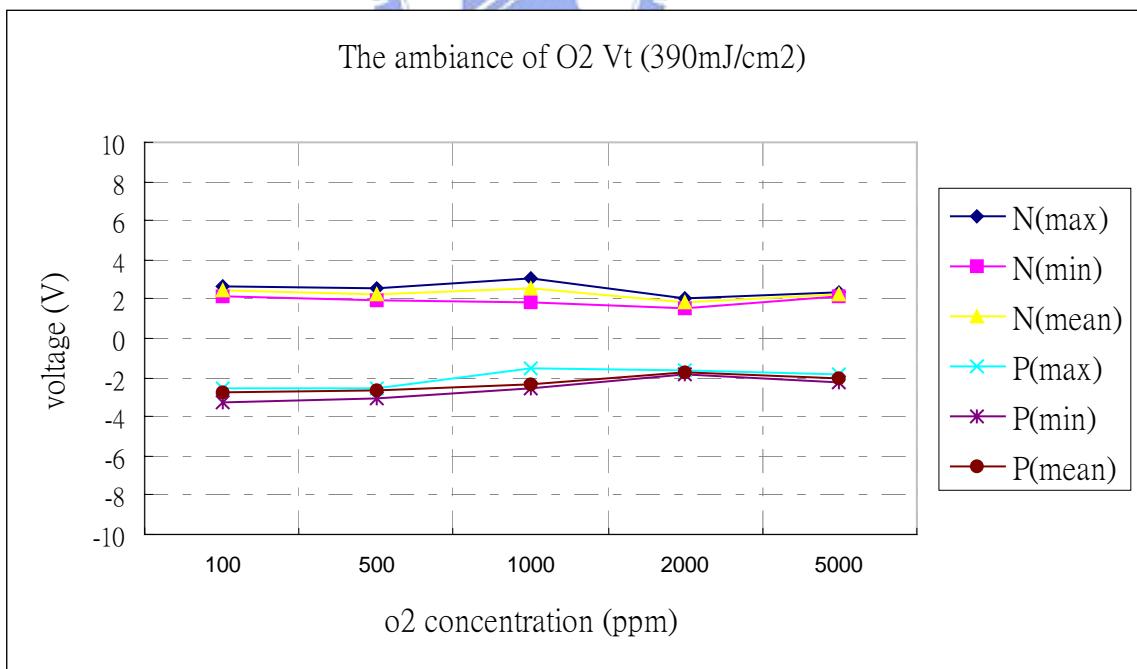
**Fig. 3-39** The transfer characteristics of p type ELA poly-Silicon TFTs. Laser energy 900mJ, laser energy density 360mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> –2.1V, U<sub>fe</sub> 101 cm<sup>2</sup>/V•sec, I<sub>off</sub> 1.85E-13A, SS 0.21 and on/off current ratio 5.9E+6



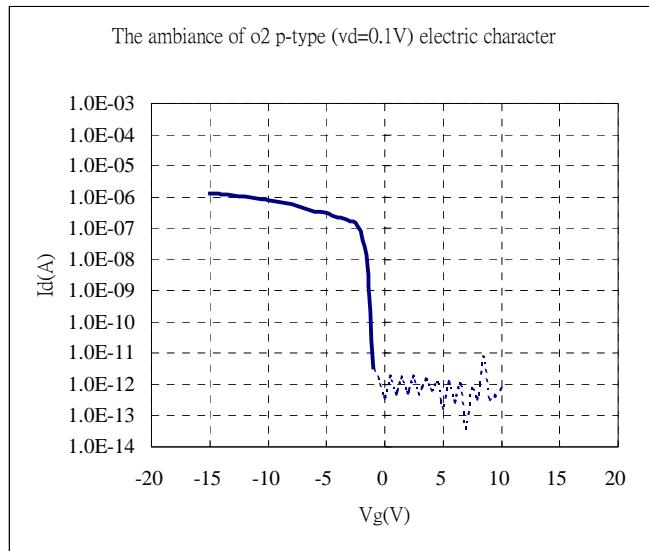
**Fig. 3-40** The transfer characteristics of n type ELA poly-Silicon TFTs. Laser energy 900mJ, laser energy density 360mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> 2.8V, U<sub>fe</sub> 123 cm<sup>2</sup>/V•sec, I<sub>off</sub> 2.02E-13A, SS 0.38 and on/off current ratio 8.9E+6



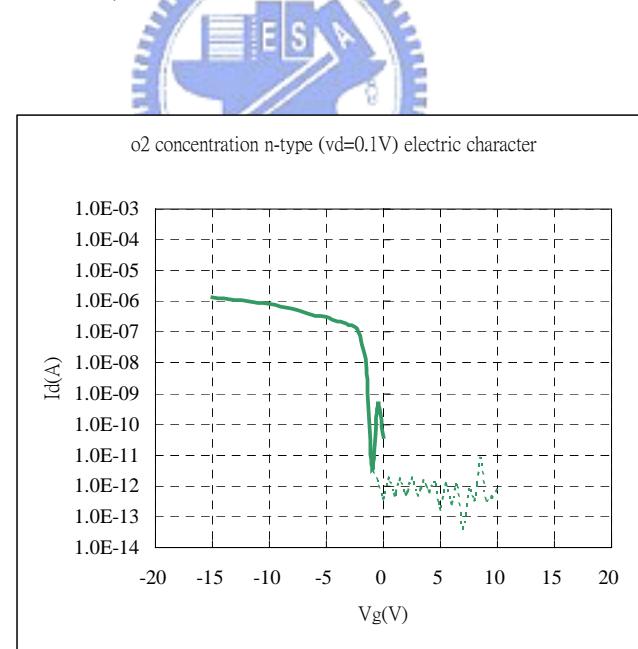
**Fig. 3-41** The mobility of different laser irradiation ambiance with pre treatment clean of HF1% for 30sec



**Fig. 3-42** The thresholds voltage of different laser irradiation ambiance with pre treatment clean of HF1% for 30sec



**Fig. 3-43** The transfer characteristics of p type ELA poly-Silicon TFTs. The irradiation ambiance with O<sub>2</sub> 2000ppm, laser energy density 390mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> -1.7V, U<sub>fe</sub> 100 cm<sup>2</sup>/V•sec, I<sub>off</sub> 1.18E-13A, SS 0.15 and on/off current ratio 1.1E+7



**Fig. 3-44** The transfer characteristics of n type ELA poly-Silicon TFTs. The irradiation ambiance with O<sub>2</sub> 2000ppm, laser energy density 390mJ/cm<sup>2</sup>, W/L = 6μm/12μm, V<sub>t</sub> 2.0V, U<sub>fe</sub> 148 cm<sup>2</sup>/V•sec, I<sub>off</sub> 2.94E-13A, SS 0.47 and on/off current ratio 8.3E+6