

Fig. 1 XRD spectra of  $\text{Al}_{0.3}\text{Ga}_{0.7}\text{N}$  and  $\text{Al}_{0.6}\text{Ga}_{0.4}\text{N}$  thin films.

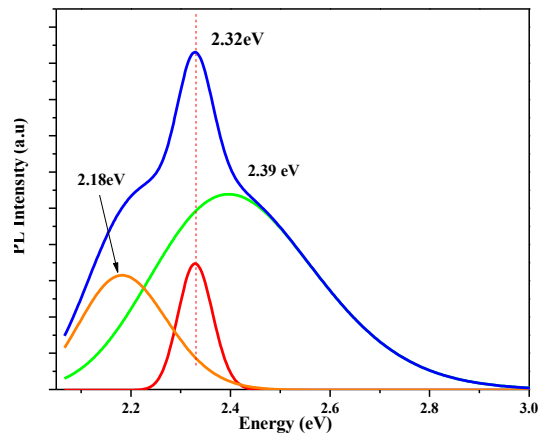


Fig. 2 Photoluminescence of  $\text{Al}_{0.3}\text{Ga}_{0.7}\text{N}$

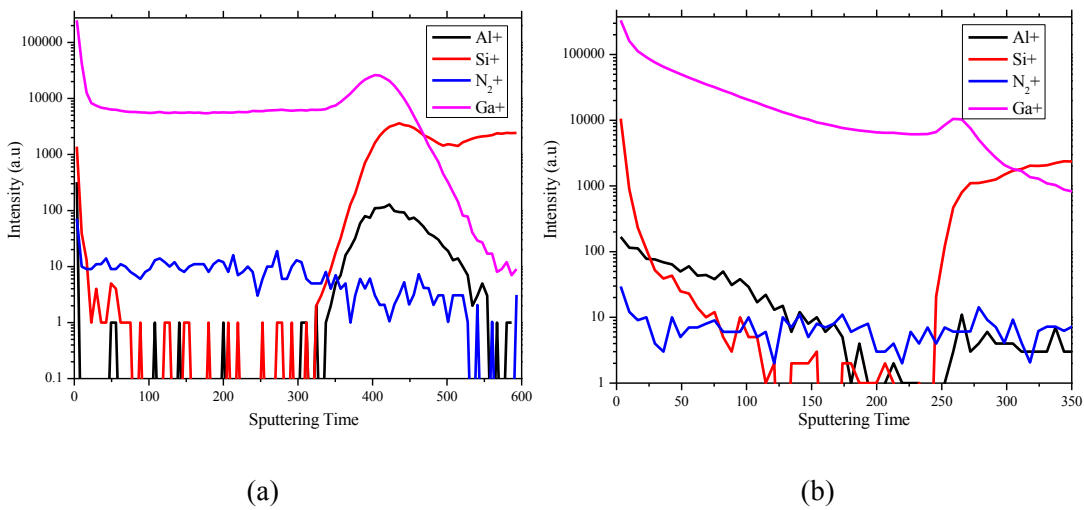


Fig. 3 SIMS profile distribution of  $\text{Al}_{0.3}\text{Ga}_{0.7}\text{N}$  (a) and  $\text{Al}_{0.6}\text{Ga}_{0.4}\text{N}$  (b)