

5. Conclucions:

We have fabricated a special carbon nanotube field effect transistor (CNT FET) for biological application. A passivation layer used here was designed to decrease the leakage current. It was confirmed that the leakage current was improved by adding passivation layers on CNT FET. The results also demonstrated that the passivated CNT FET was capable of determining the ionic concentration in aqueous solution.

It also implied the CNT FET was able to be employed to detect the ions produced from specific biological reactions.

