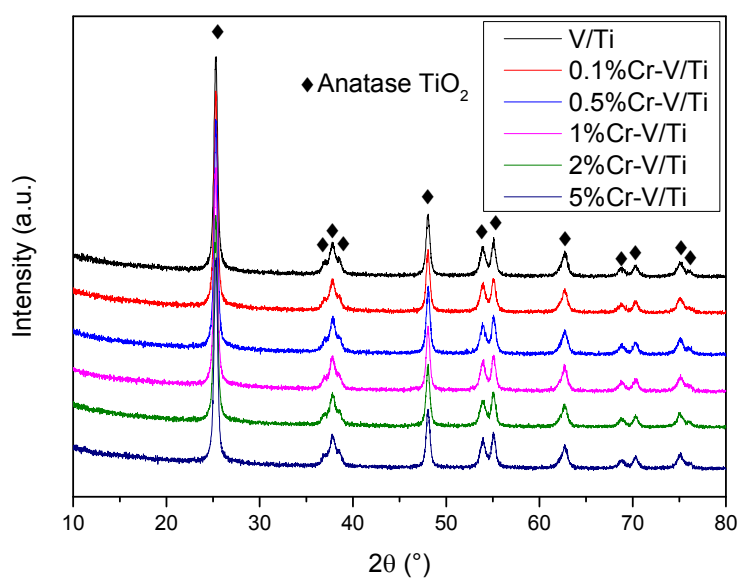


## SUPPORT INFORMATION

Fig 1 was the XRD patterns of Cr-V/Ti catalysts. As shown in Fig 1, the chromium oxides and vanadium oxide were highly dispersed on catalyst surface even for 5 % Cr loading, and there was only the anatase phase of  $\text{TiO}_2$ .



**Fig. 1.** XRD patterns of Cr-V/Ti catalysts.