

ELECTRONIC SUPPLEMENTARY INFORMATION (ESI)

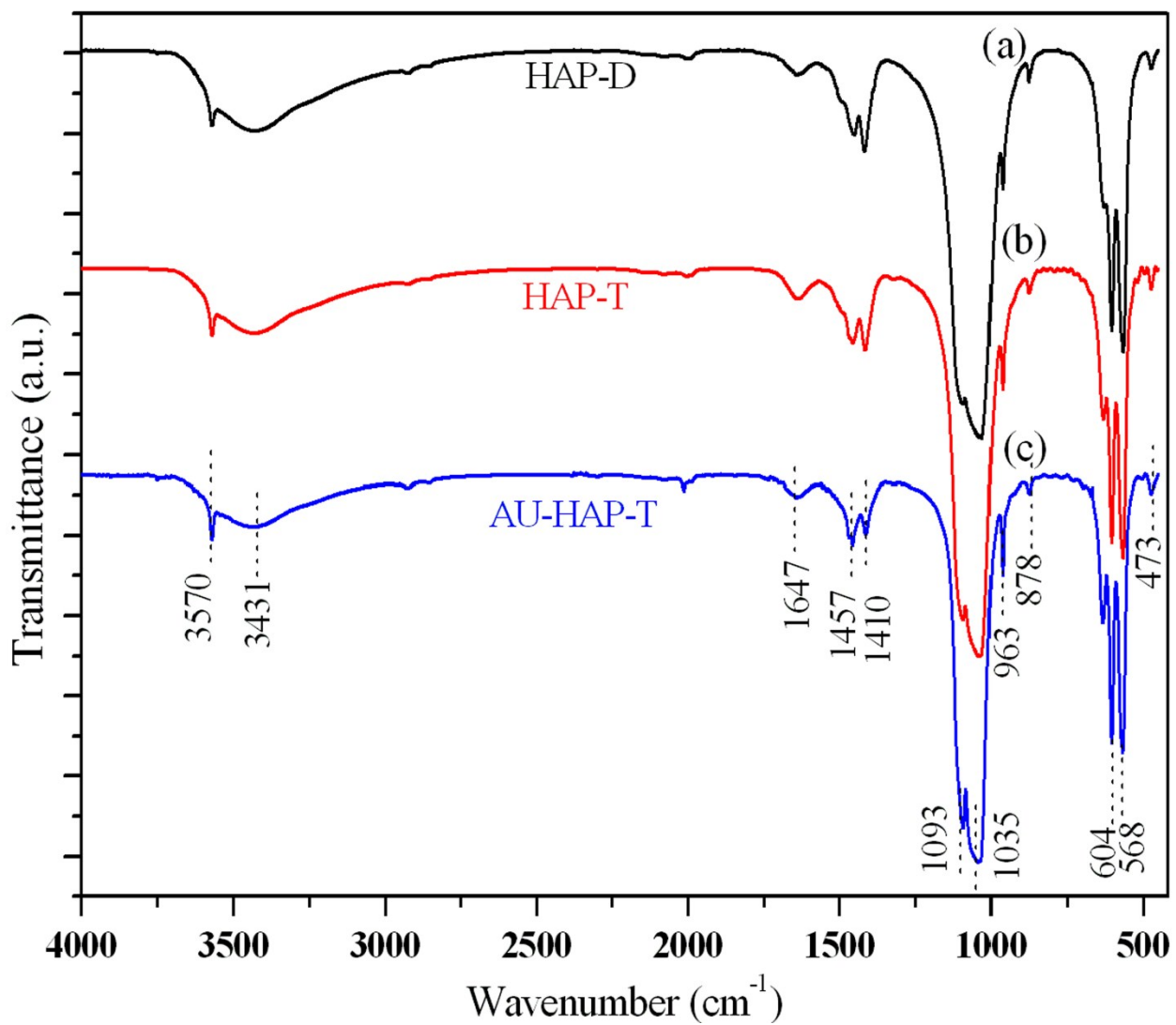


Fig.ESI.1 FT-IR spectra of (a) HAP-D, (b) HAP-T and (c) Au/HAP-T catalysts.

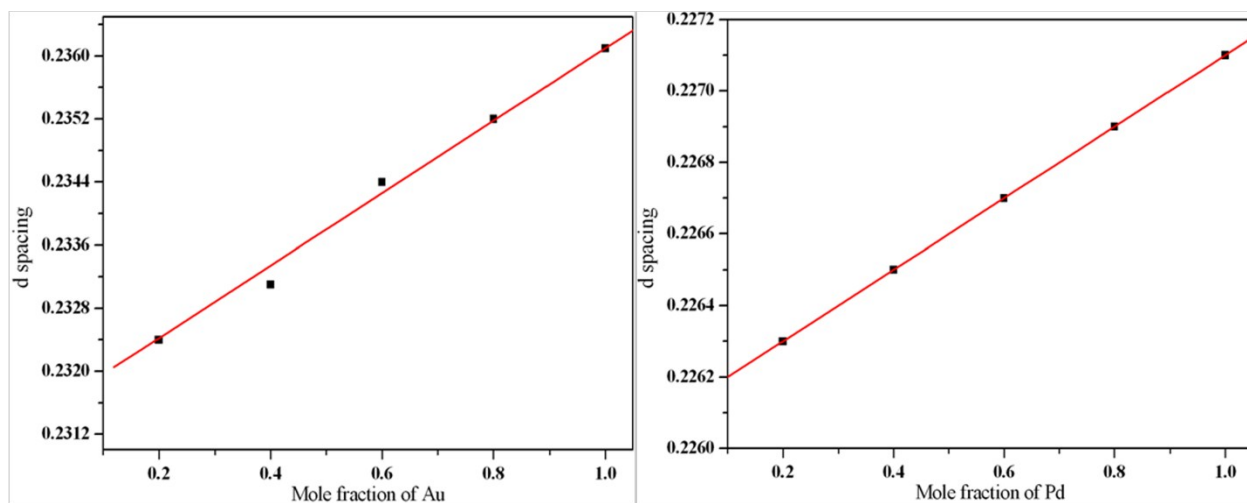


Fig.ESI2 Plot of Au mole fraction ($X_{Au}/\%$) and Pd mole fraction ($X_{Pd}/\%$) versus d-spacing (d_{111}/nm)

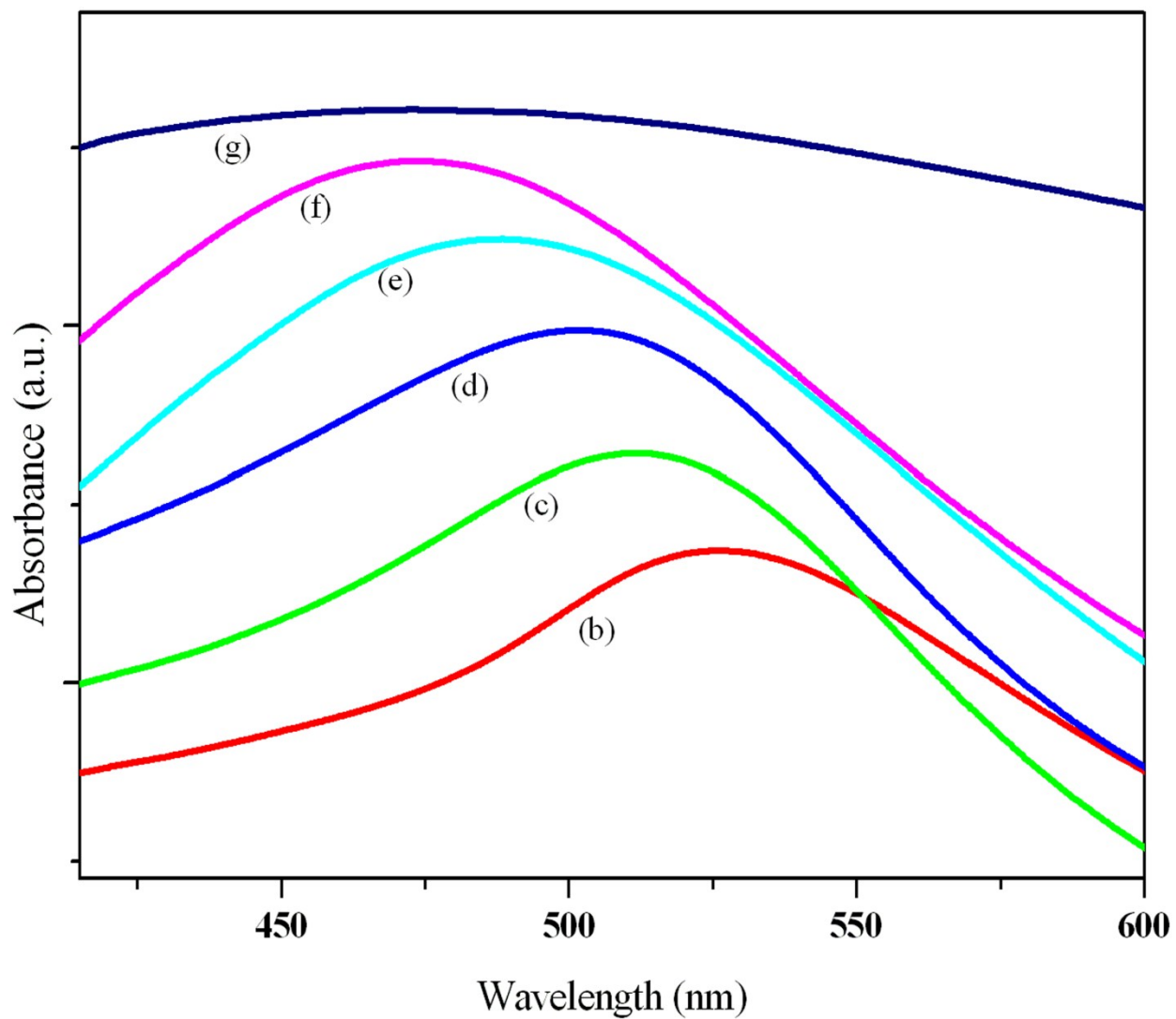


Fig. ESI 3 Enlarged view of UV-DRS spectra of UV-DRS spectra of (a). Au/HAP-T (b). $\text{Au}_{0.8}\text{Ag}_{0.2}$ /HAP-T (c). $\text{Au}_{0.6}\text{Ag}_{0.4}$ /HAP-T (d). $\text{Au}_{0.4}\text{Ag}_{0.6}$ /HAP-T (e) $\text{Au}_{0.2}\text{Ag}_{0.8}$ /HAP-T and (f). Ag/HAP-T.

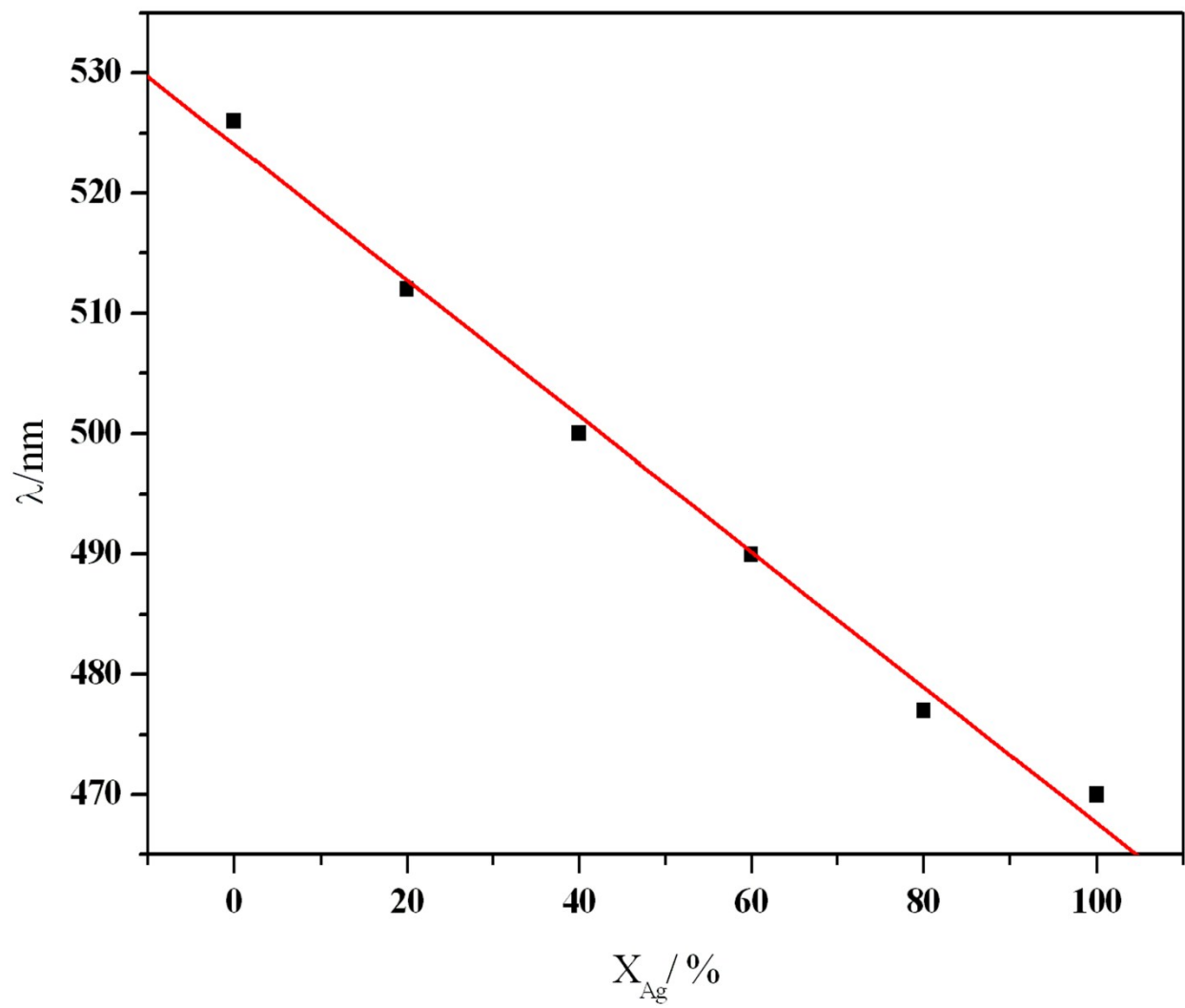


Fig.ESI 4 Plot of λ_{max} Vs Ag mole ratio.