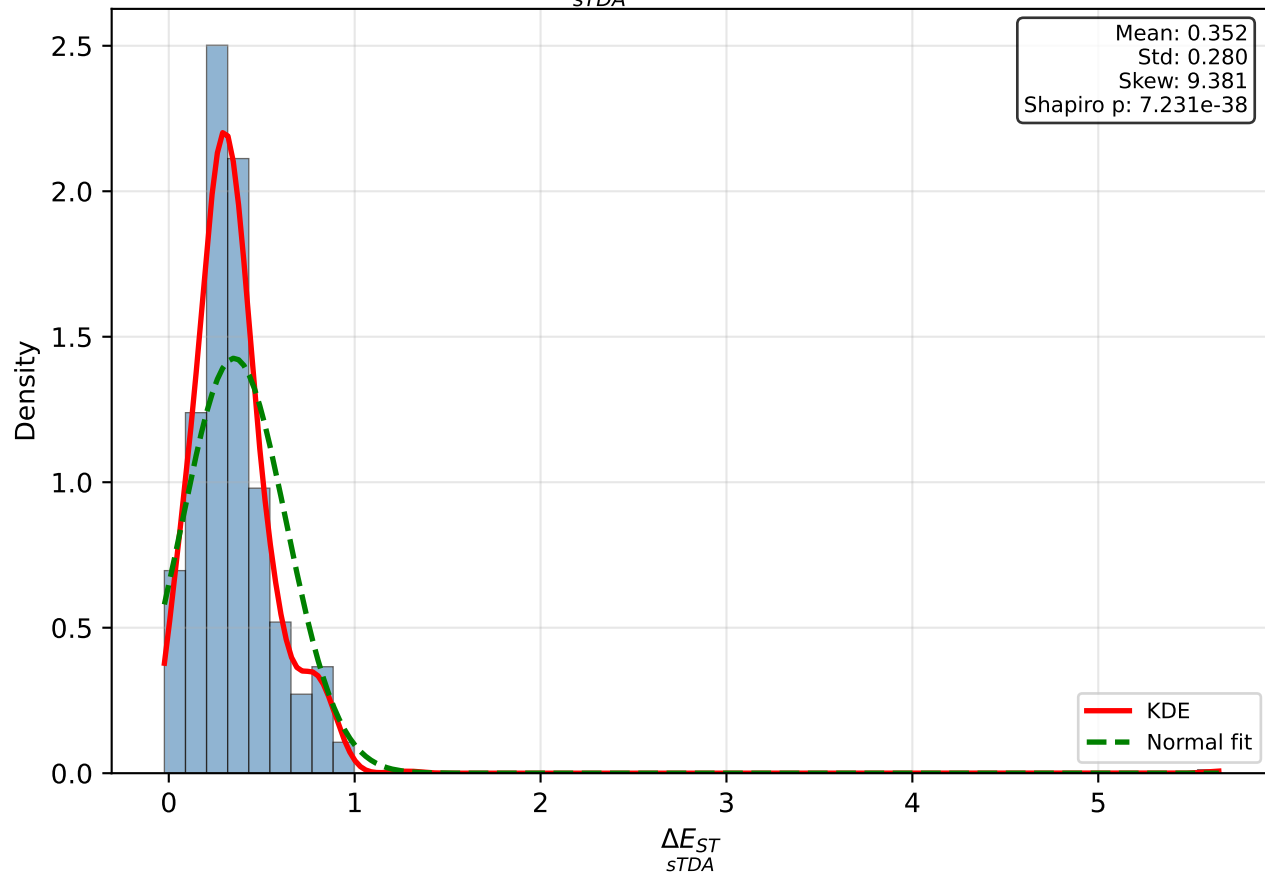
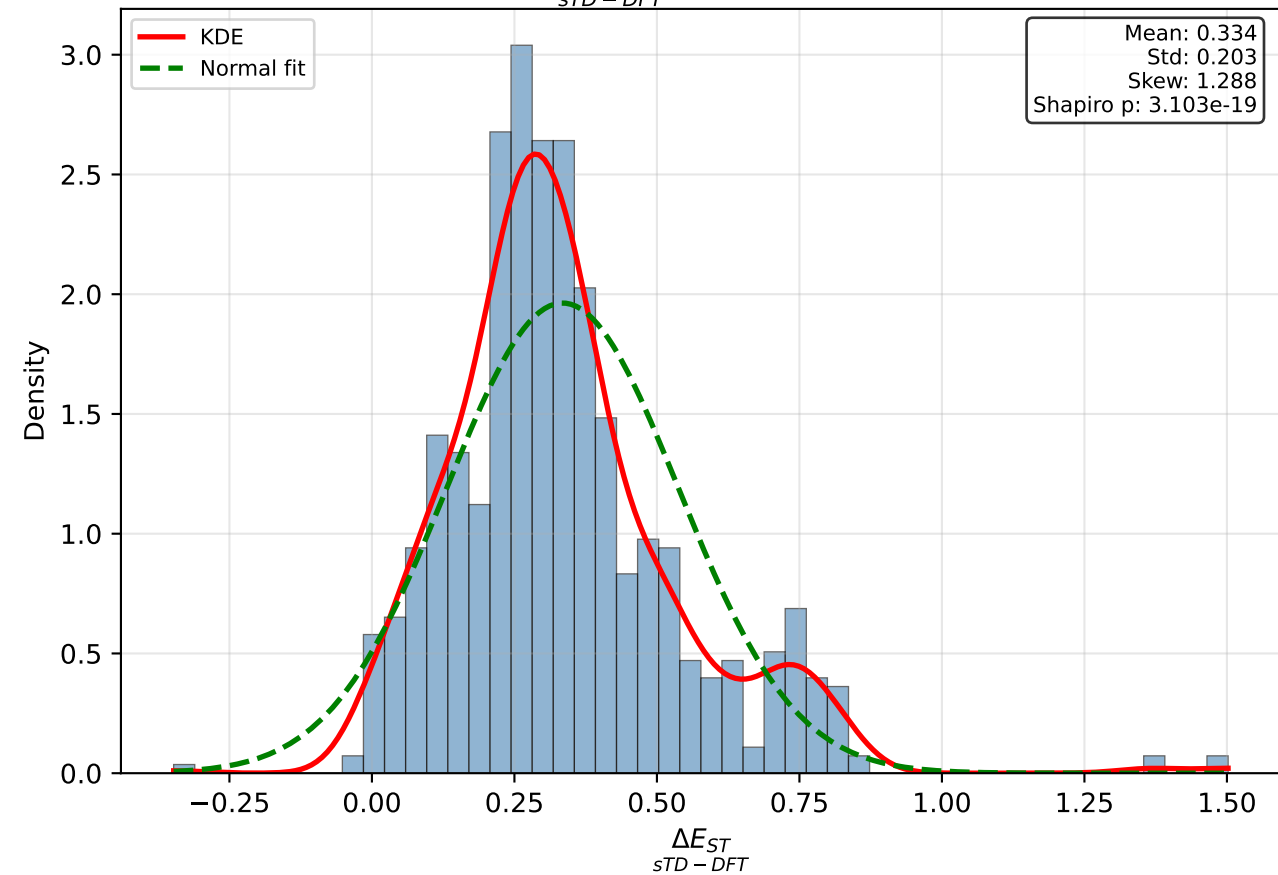


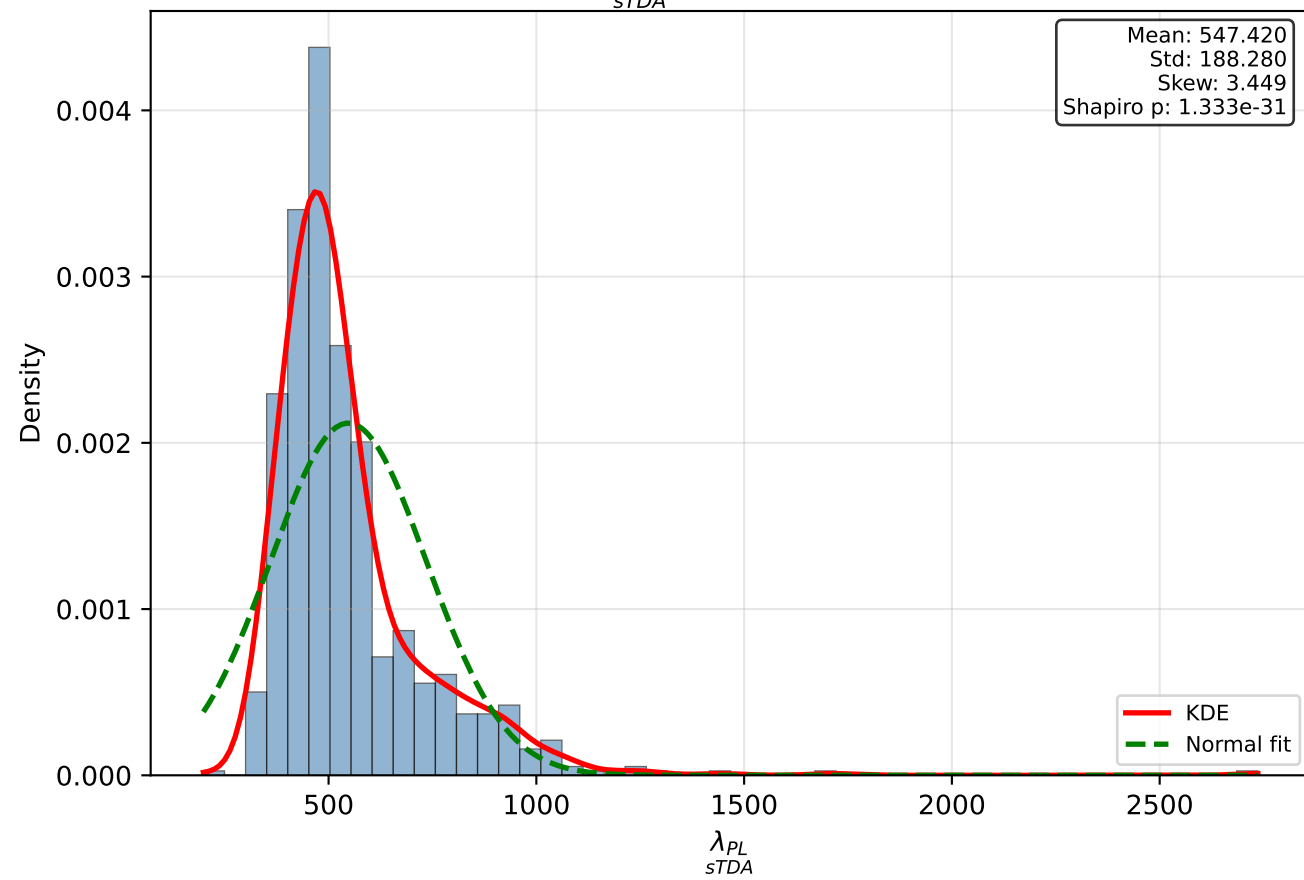
$\Delta E_{ST}$  Distribution  
 $_{sTDA}$



$\Delta E_{ST}$  Distribution  
 $_{sTD - DFT}$



$\lambda_{PL}$  Distribution  
 $_{sTDA}$



$\lambda_{PL}$  Distribution  
 $_{sTD - DFT}$

