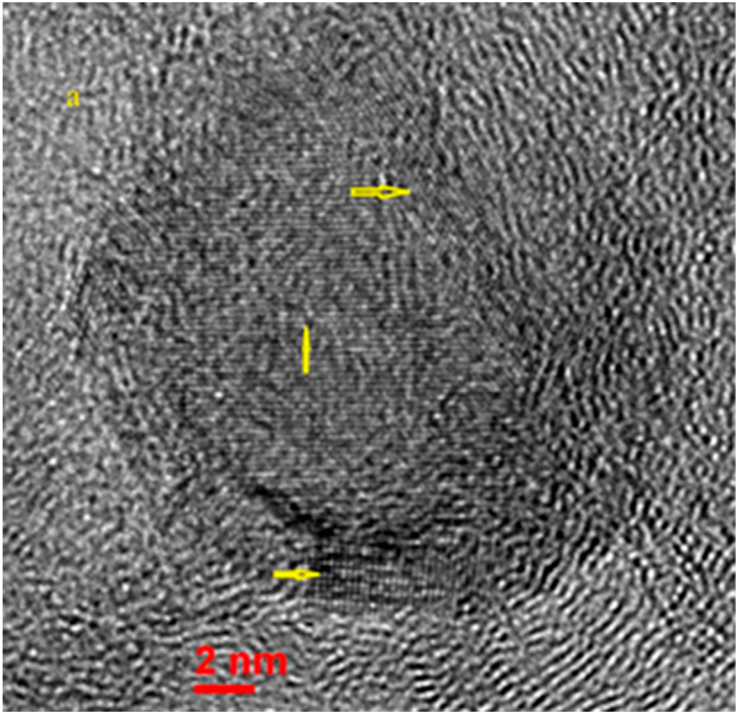
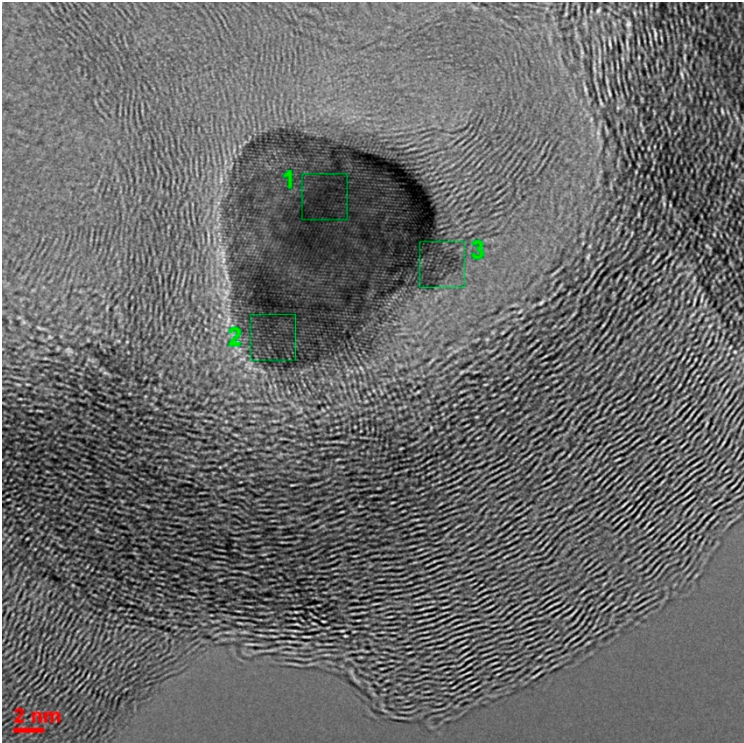


Supplementary Materials



a)



b)

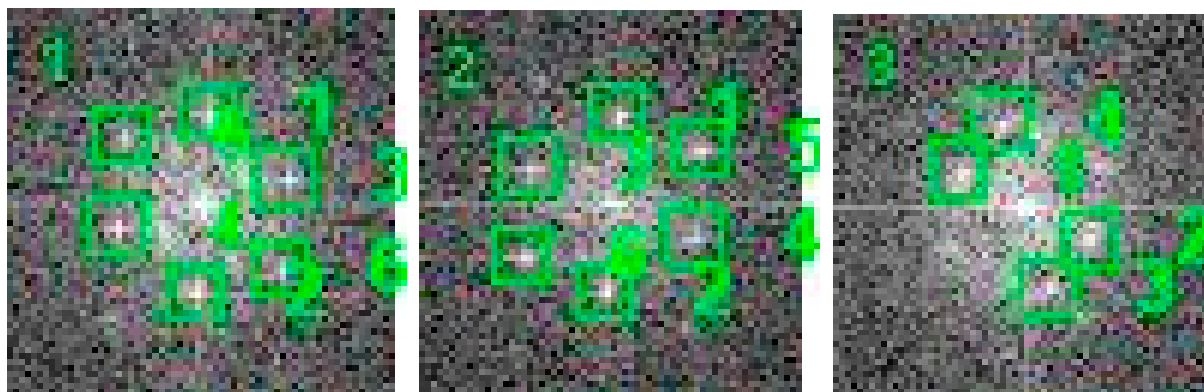


Figure S1. TEM pictures of the surface of catalysts (a)  $1.5\text{Cr}/3\text{Ni}/\text{C}_{\text{ox}}$  and (b)  $0.1\text{Pt}/1.5\text{Cr}/3\text{Ni}/\text{C}_{\text{ox}}$ ; electron diffraction patterns of crystallites Cr-Ni (1, 2) and Pt (3) on the surface of the  $0.1\text{Pt}/1.5\text{Cr}/3\text{Ni}/\text{C}_{\text{ox}}$  catalyst.