

Supporting Information

Figure S1. Effect of pretreatment on the catalytic performance of Pt/Mg-P-O (A); Pt/Al-P-O (B); and Pt/Ca-P-O (C). These catalysts, previously calcined at 500 °C, were either pretreated in 4% H₂ at 300 °C prior to catalytic testing (●), or not pretreated in 4% H₂ at all (■).

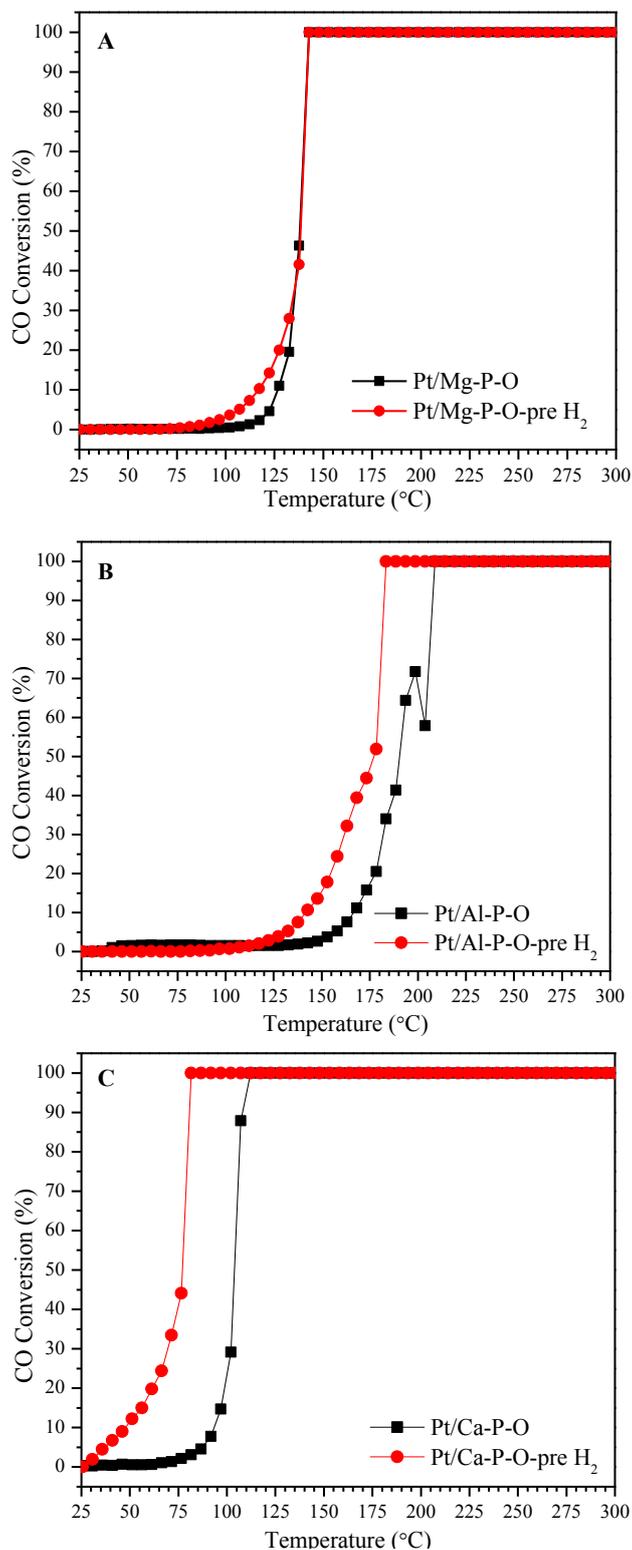
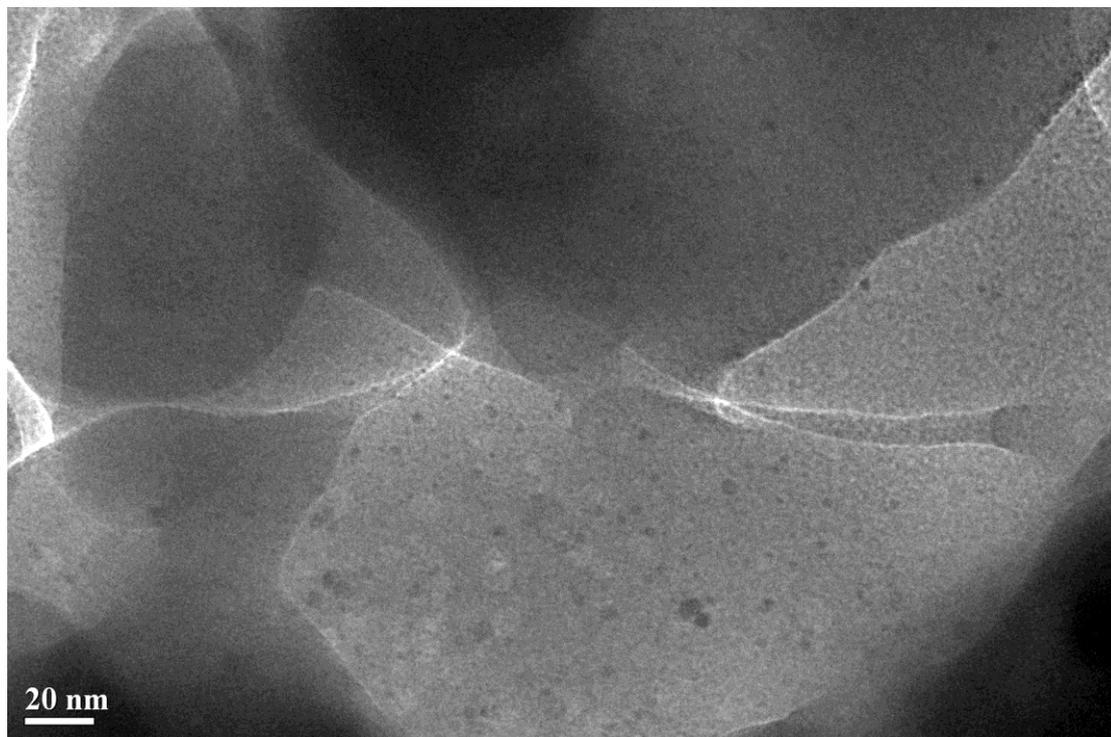
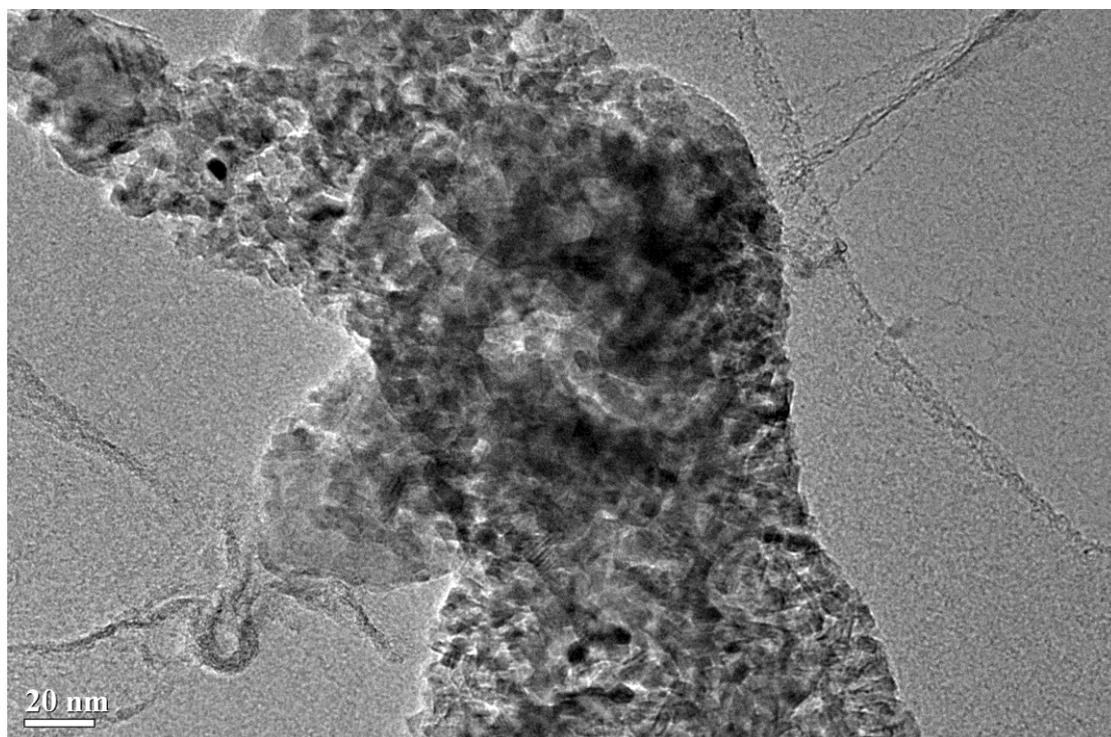


Figure S2. TEM image of spent Pt/Fe-P-O (calcined at 500 °C, pretreated in 4% H₂ at 300 °C, and tested in CO oxidation). Both images (a,b) correspond to the same catalyst.

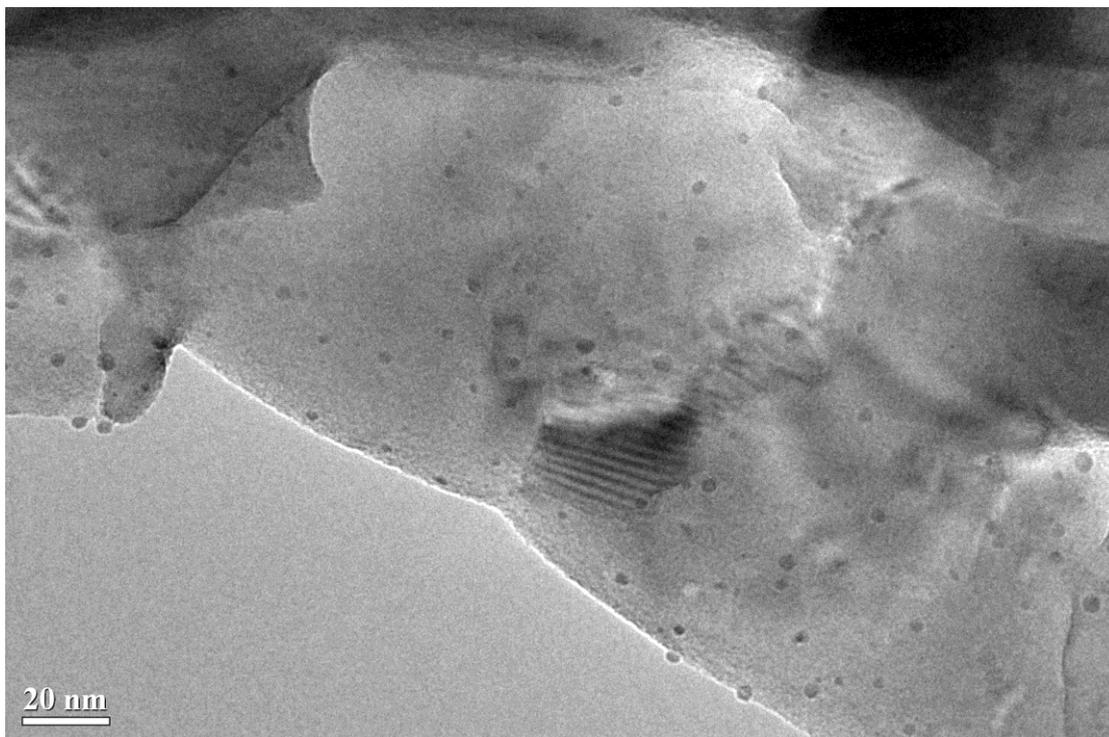


(a)

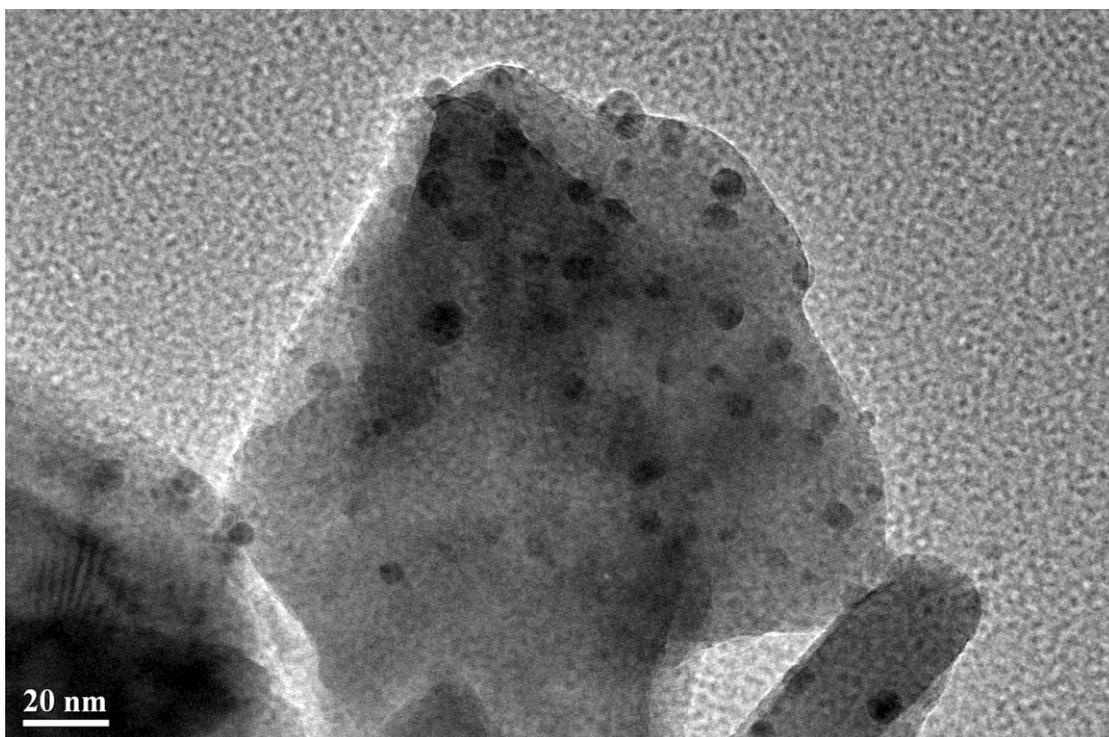


(b)

Figure S3. TEM image of spent Pt/Co-P-O (calcined at 500 °C, pretreated in 4% H₂ at 300 °C, and tested in CO oxidation). Both images (a,b) correspond to the same catalyst.

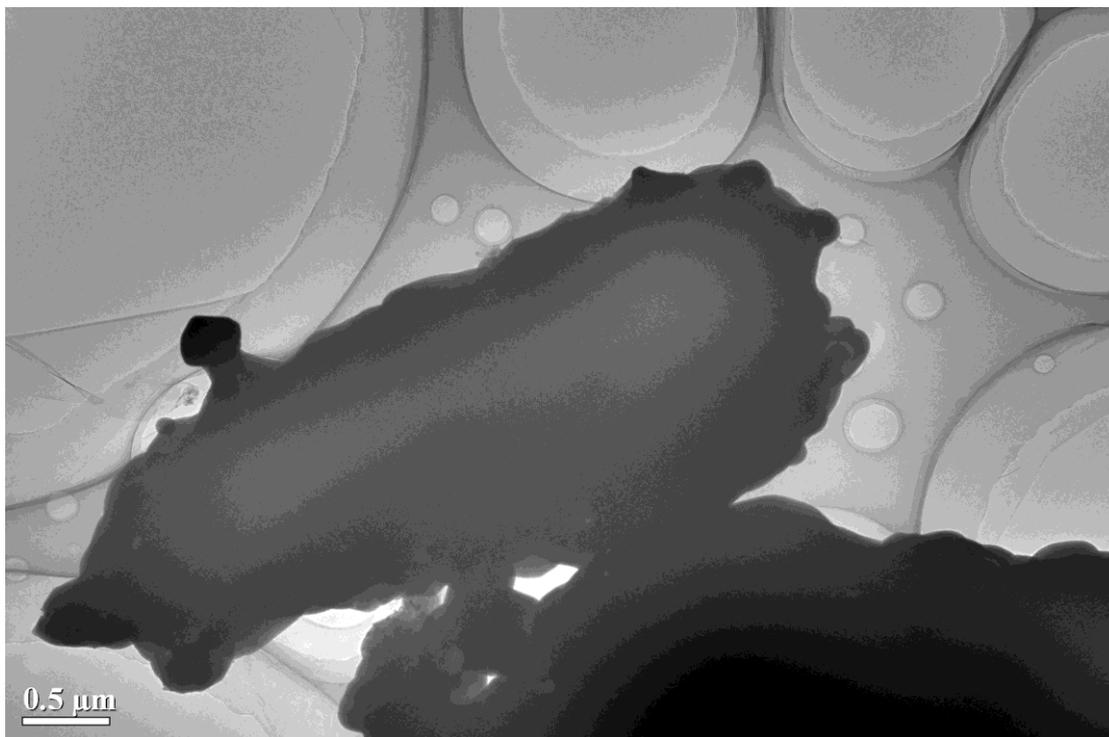


(a)

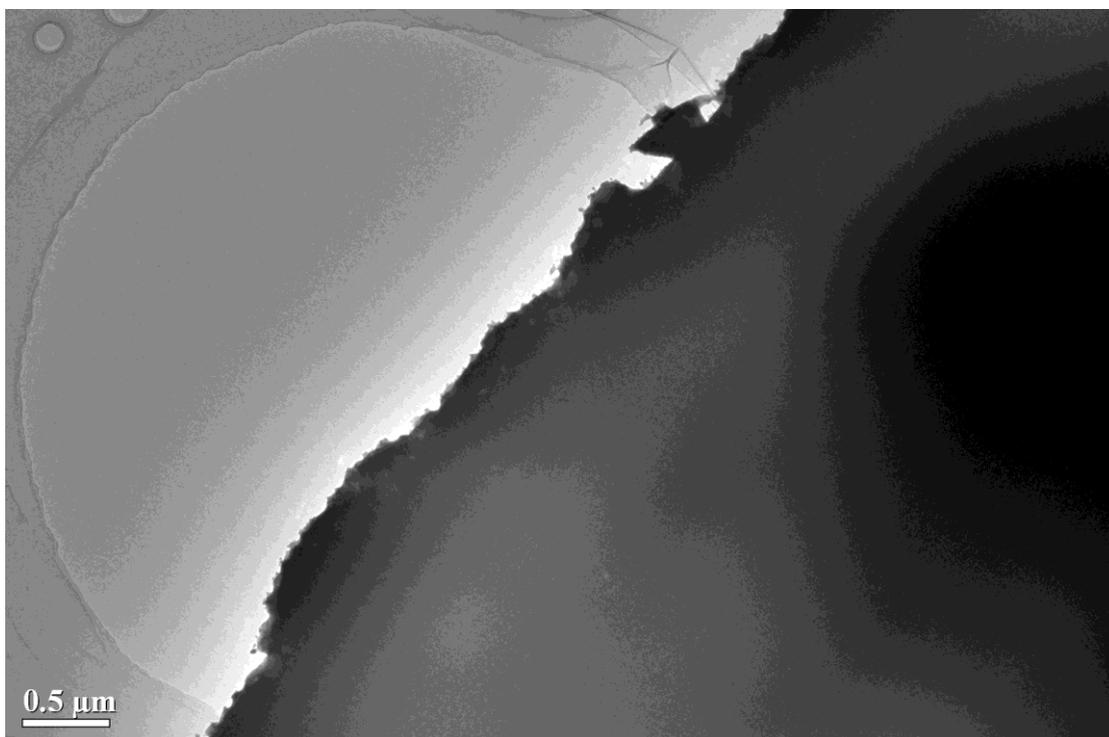


(b)

Figure S4. TEM image of spent Pt/Zn-P-O (calcined at 500 °C, pretreated in 4% H₂ at 300 °C, and tested in CO oxidation). Both images (a,b) correspond to the same catalyst.

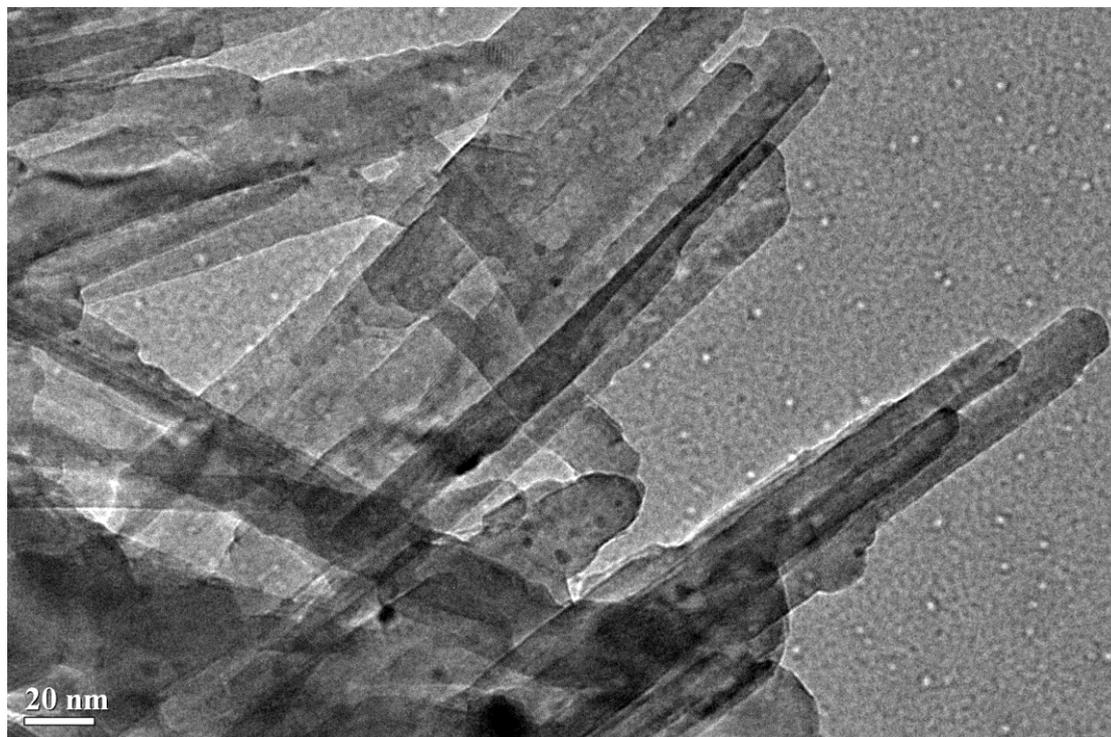


(a)

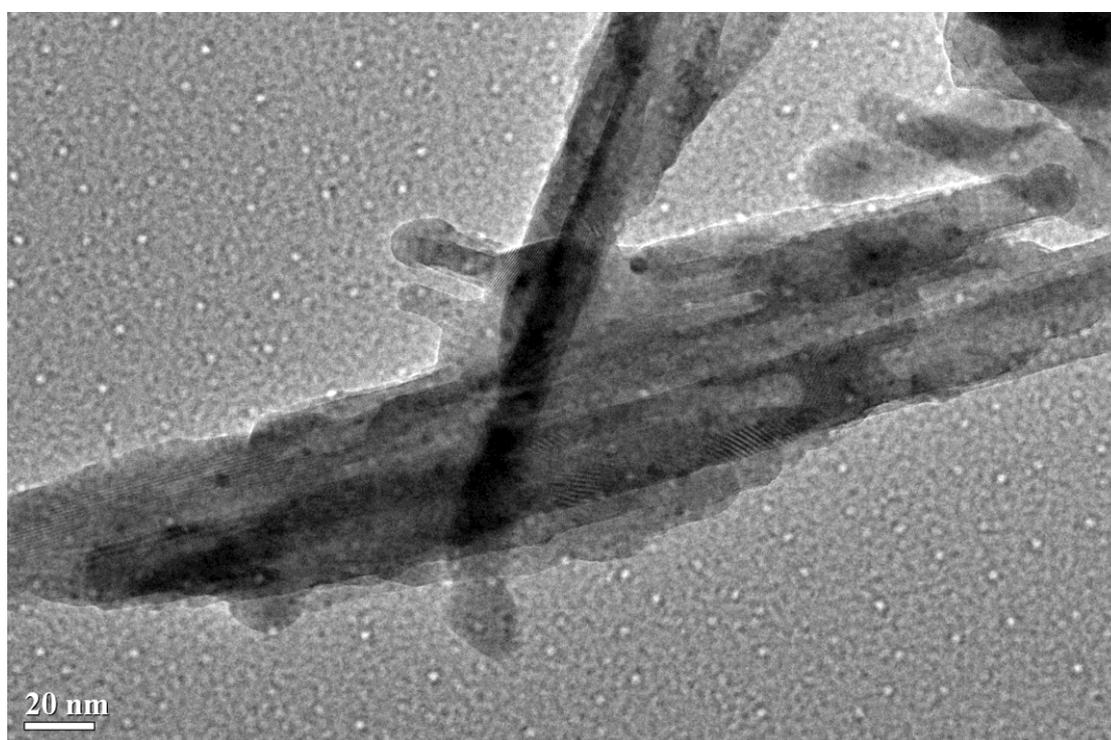


(b)

Figure S5. TEM image of spent Pt/La-P-O (calcined at 500 °C, pretreated in 4% H₂ at 300 °C, and tested in CO oxidation). Both images (a,b) correspond to the same catalyst.



(a)



(b)

Figure S6. H₂-TPR data of M-P-O supports (calcined at 500 °C).