Insights into the structural dynamics of Pt/CeO_2 single-site cat-alysts during CO oxidation

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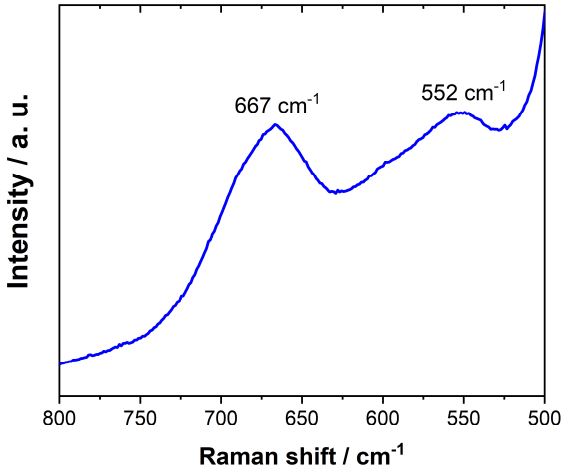

Figure S1. Raman spectra of as-prepared Pt single site catalyst

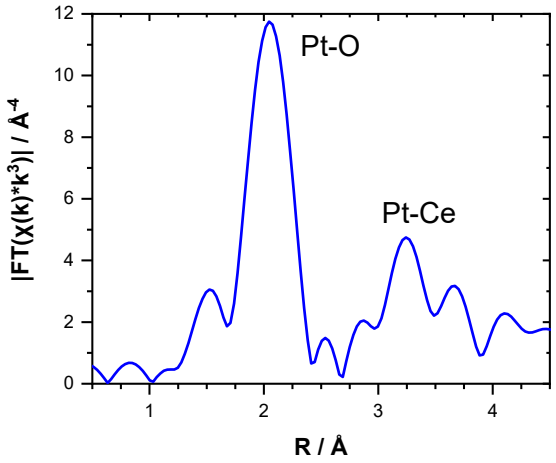

Figure S2. Fourier transformed k^2-weighted EXAFS spectrum of the as prepared Pt/CeO_2 catalyst

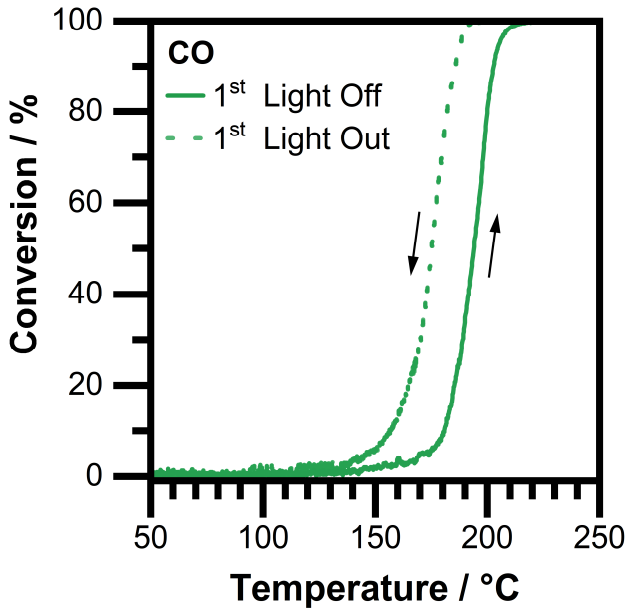

Figure S3. CO conversion curves for consecutive light-offs (1000 ppm CO and 8% O_2)

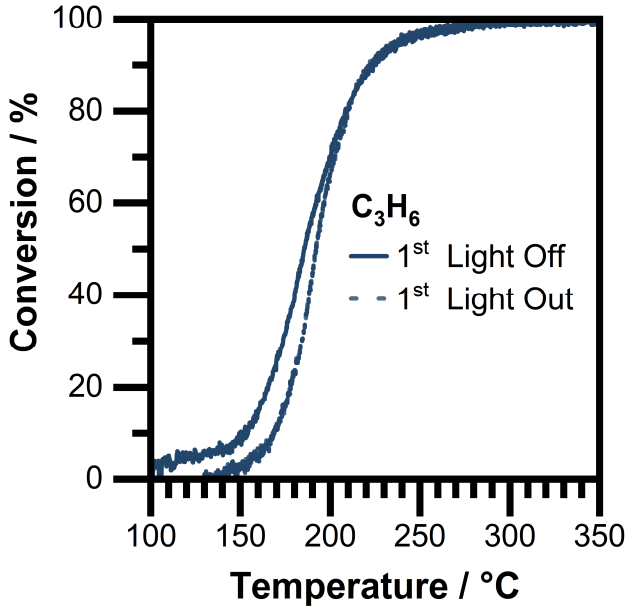

Figure S4. C_3H_6 conversion curves for consecutive light-offs (150 ppm C_3H_6 and 8% O_2)

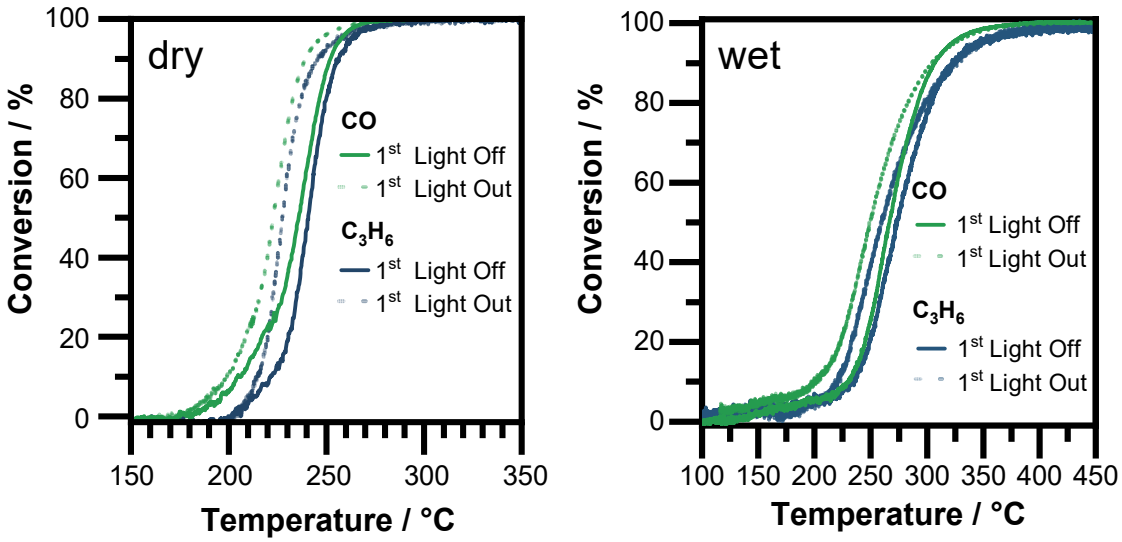

Figure S5. CO (green lines) and (blue lines) C_3H_6 conversion curves light-offs in dry (left, 1000ppm/150 ppm C_3H_6 and 8% O_2) and wet (right, 1000ppm/150 ppm C_3H_6, 6.6% H_2O and 8% O_2) conditions

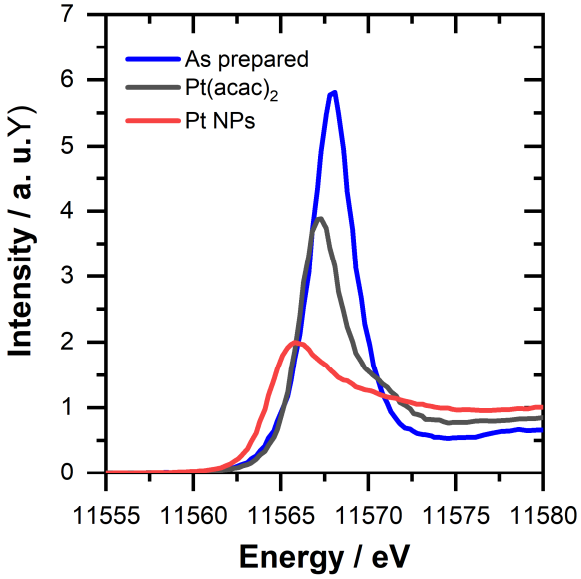

Figure S6. Pt-L_{III} edge HERFD-XANES spectrum of as prepared single sites catalyst compared to metallic Pt nanoparticles and Pt(II)(acac)$_2$ reference spectra

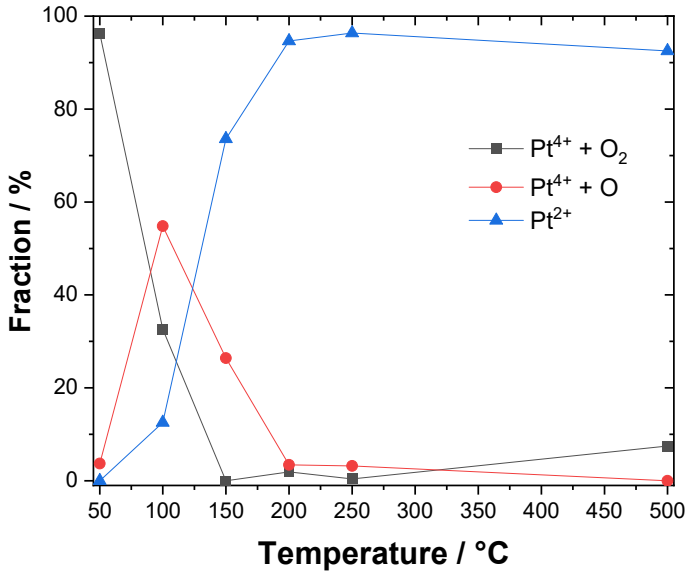

Figure S7. Pt species identified by MCR-ALS during temperature programmed oxidation in 10 % O_2/He

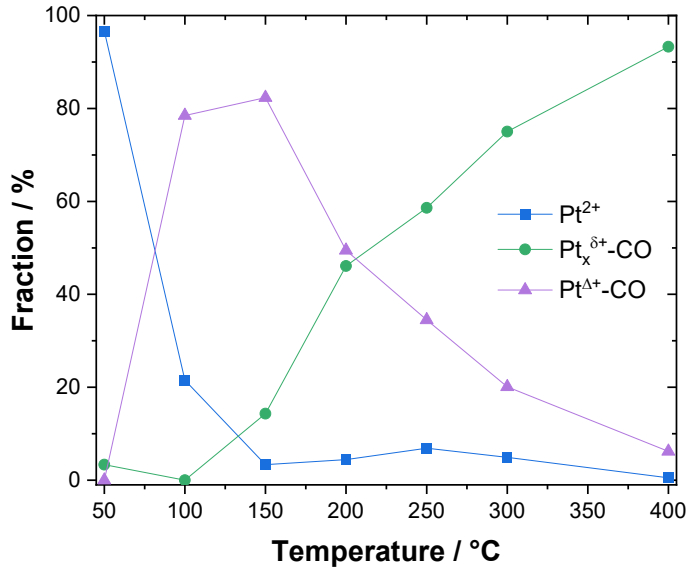

Figure S8. Pt species identified by MCR-ALS during temperature programmed reduction in 1000 ppm CO/He

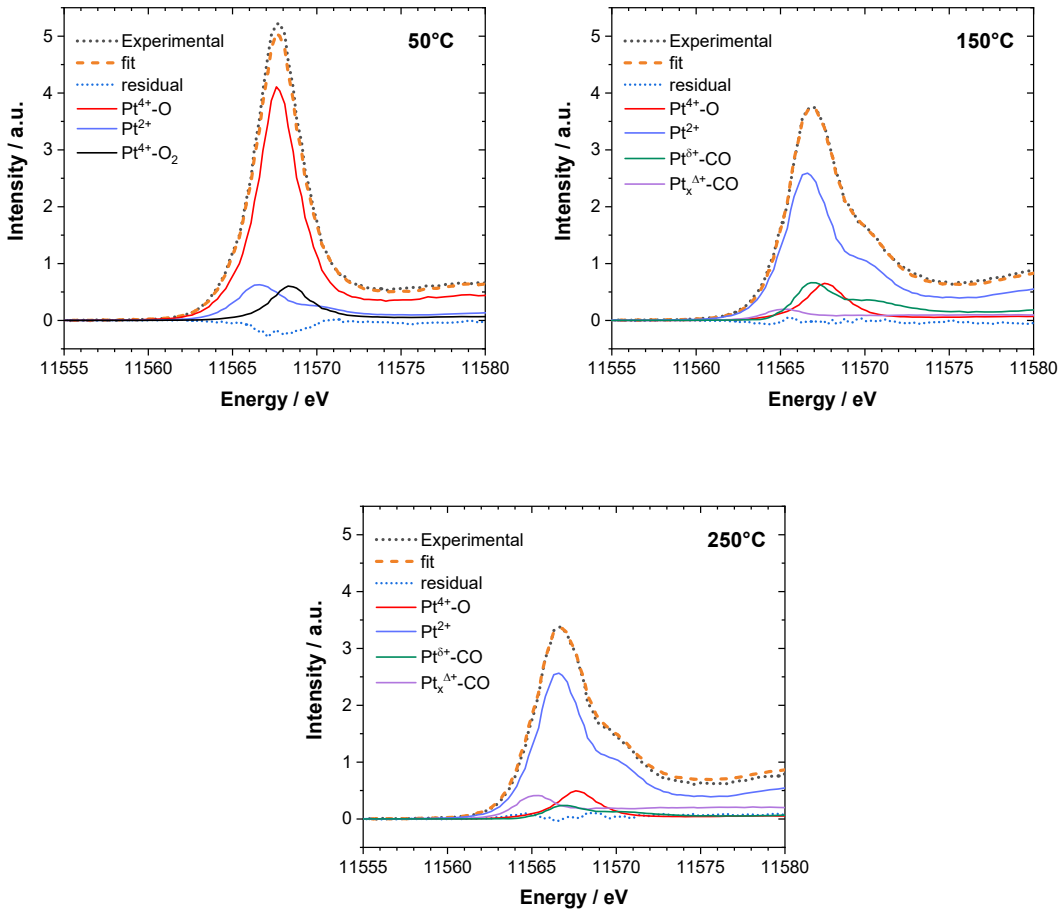

Figure S9. Pt species identified by MCR-ALS during temperature programmed reduction in 1000 ppm CO/He