

Supplementary Materials

Effect of the Chemical Composition of Mesoporous Cerium-Zirconium Oxides on the Modification with Sulfur and Gold Species and Their Application in Glycerol Oxidation

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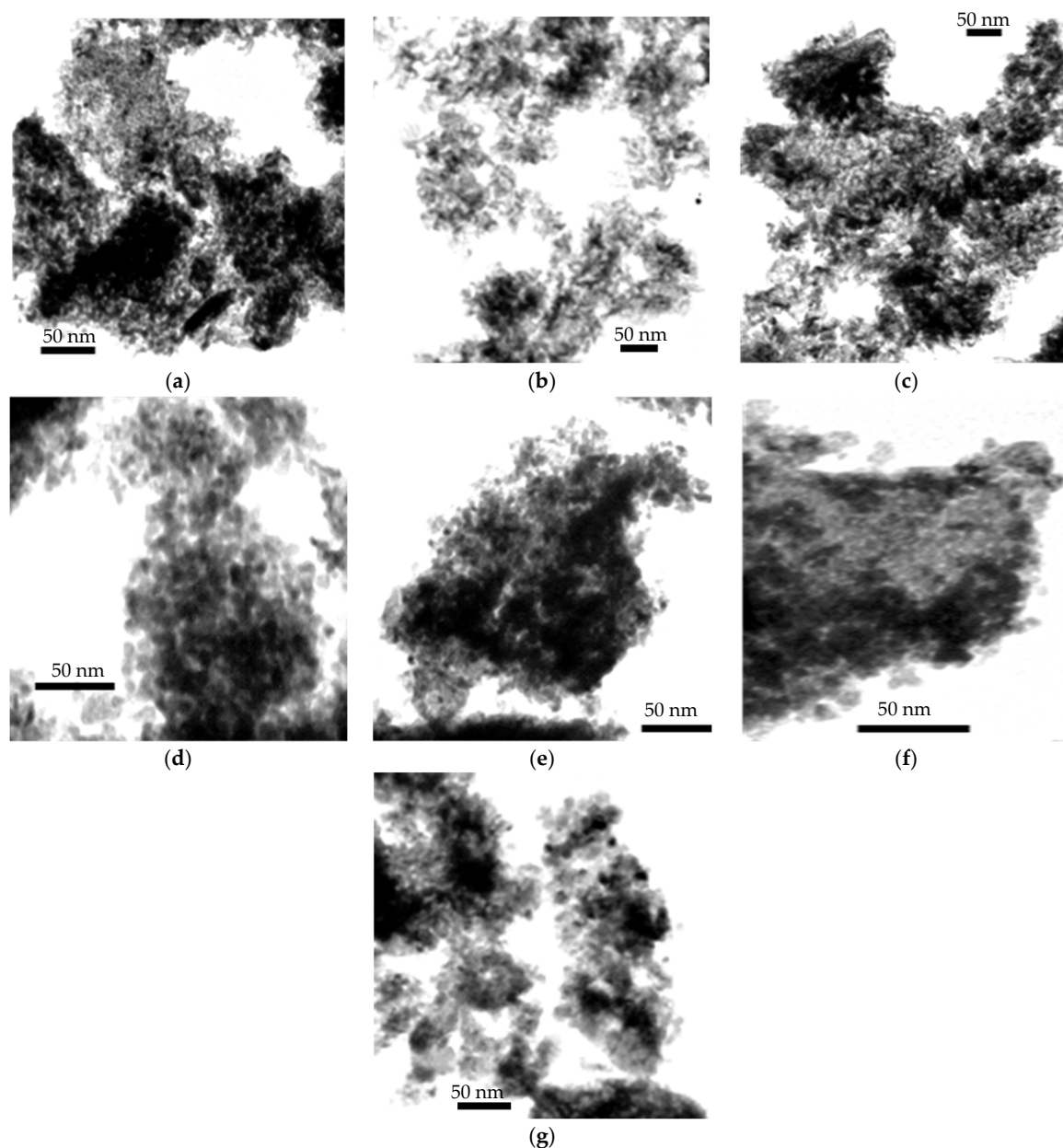


Figure S1. TEM images recorded for catalysts with sulfur species after modification with gold: (a) CeO_2 , (b) $\text{Ce}_x\text{Zr}_y\text{O}_z(4:1)$, (c) $\text{Ce}_x\text{Zr}_y\text{O}_z(2:1)$, (d) $\text{Ce}_x\text{Zr}_y\text{O}_z(1:1)$, (e) $\text{Ce}_x\text{Zr}_y\text{O}_z(1:2)$, (f) $\text{Ce}_x\text{Zr}_y\text{O}_z(1:4)$, (g) ZrO_2 . The lines in the images correspond to 50 nm.

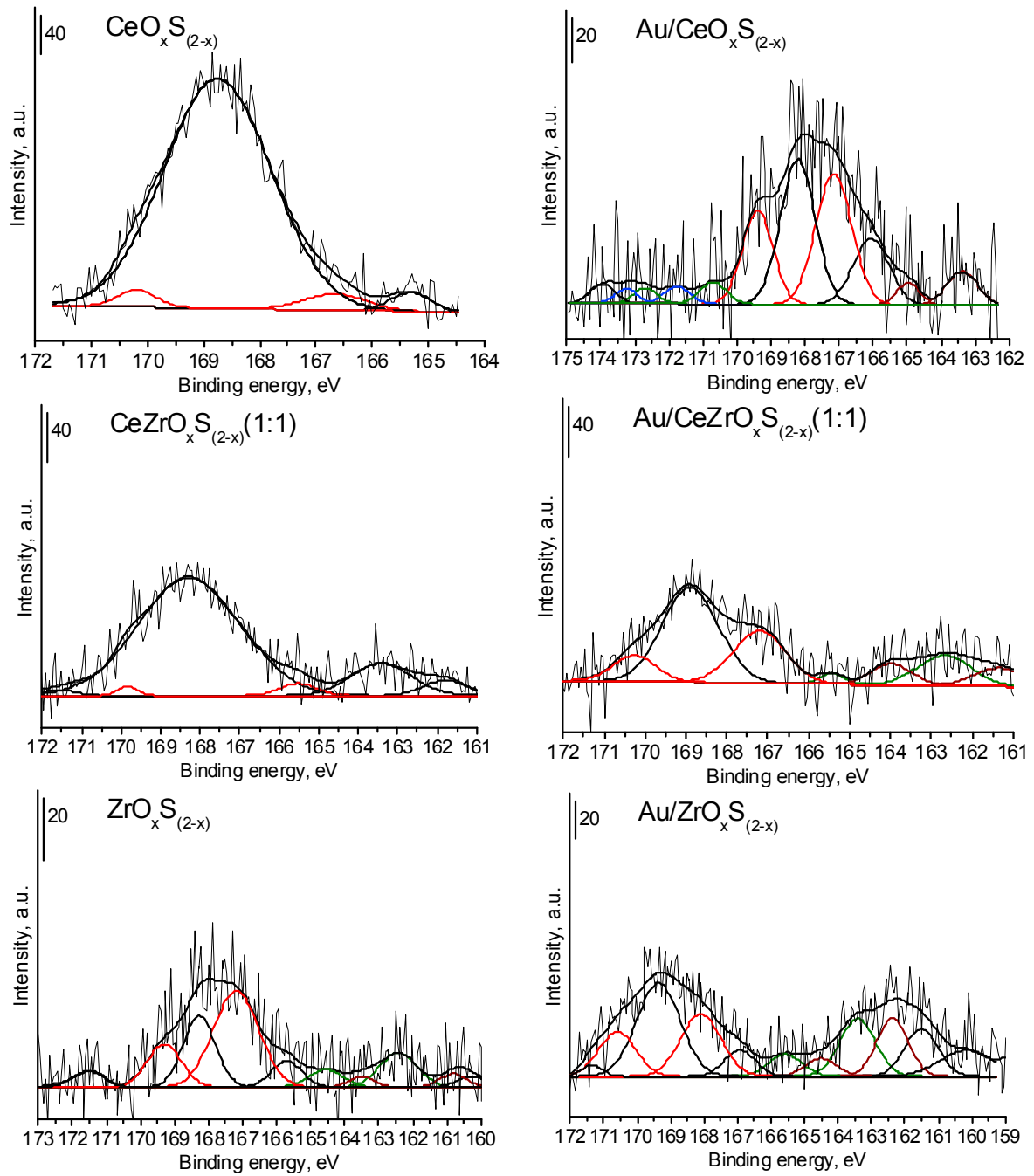


Figure S2. XP spectra recorded for S 2p species for samples before and after modification with Au.

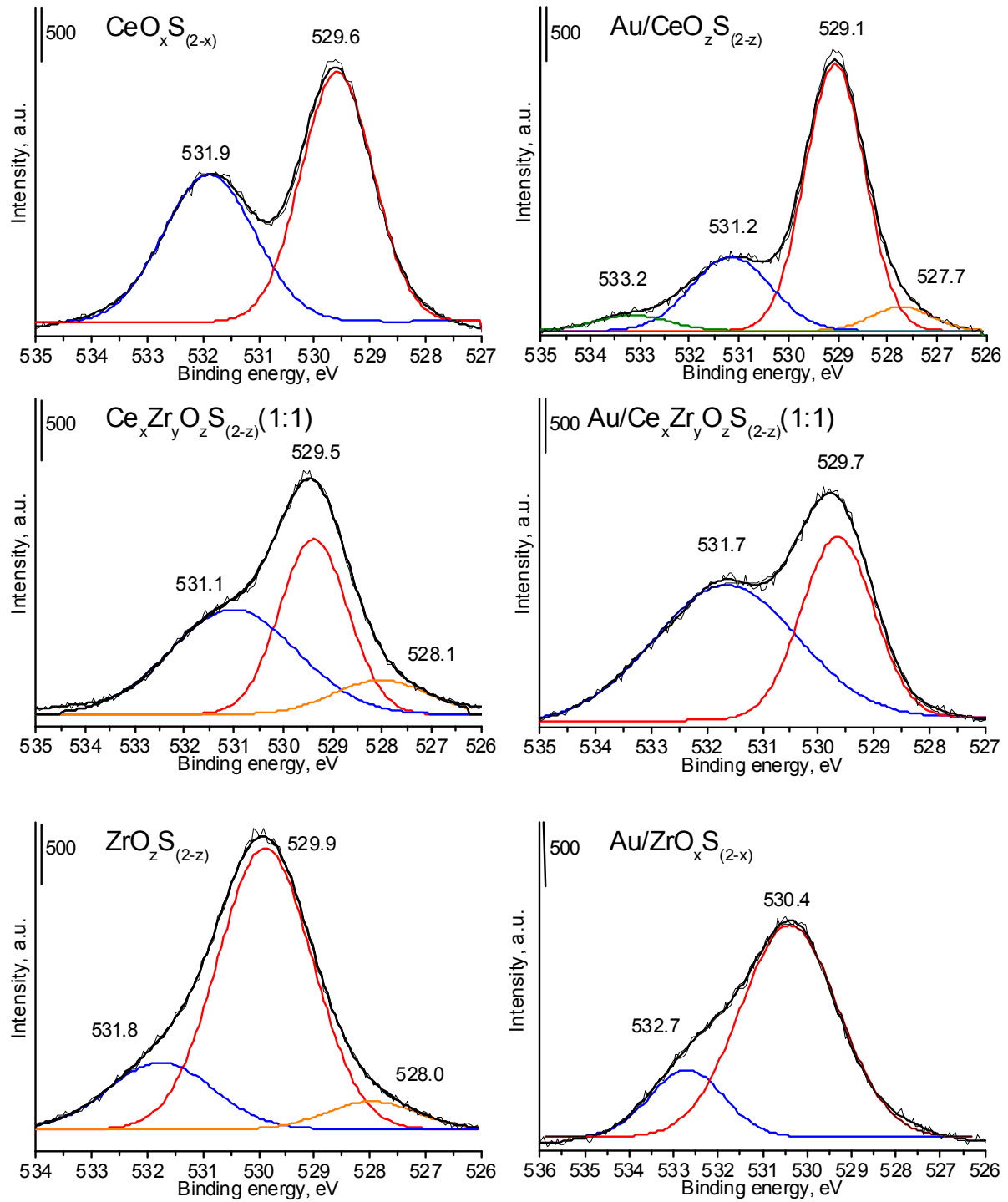


Figure S3. XPS spectra recorded for O 1s species for samples before and after modification with Au.

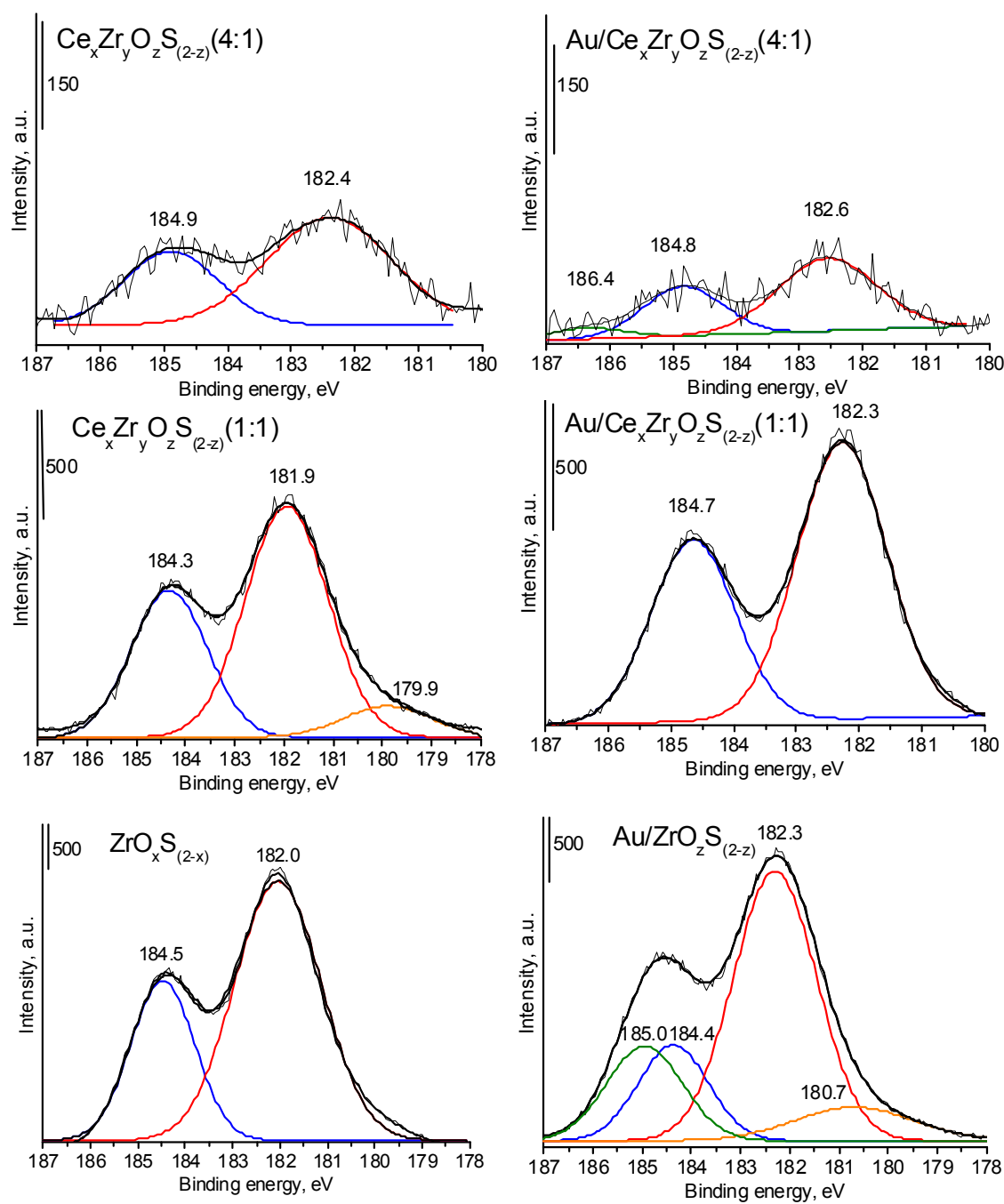


Figure S4. XPS spectra recorded for Zr 3d species for selected Ce-Zr oxides and zirconia with S before and after modification with Au.

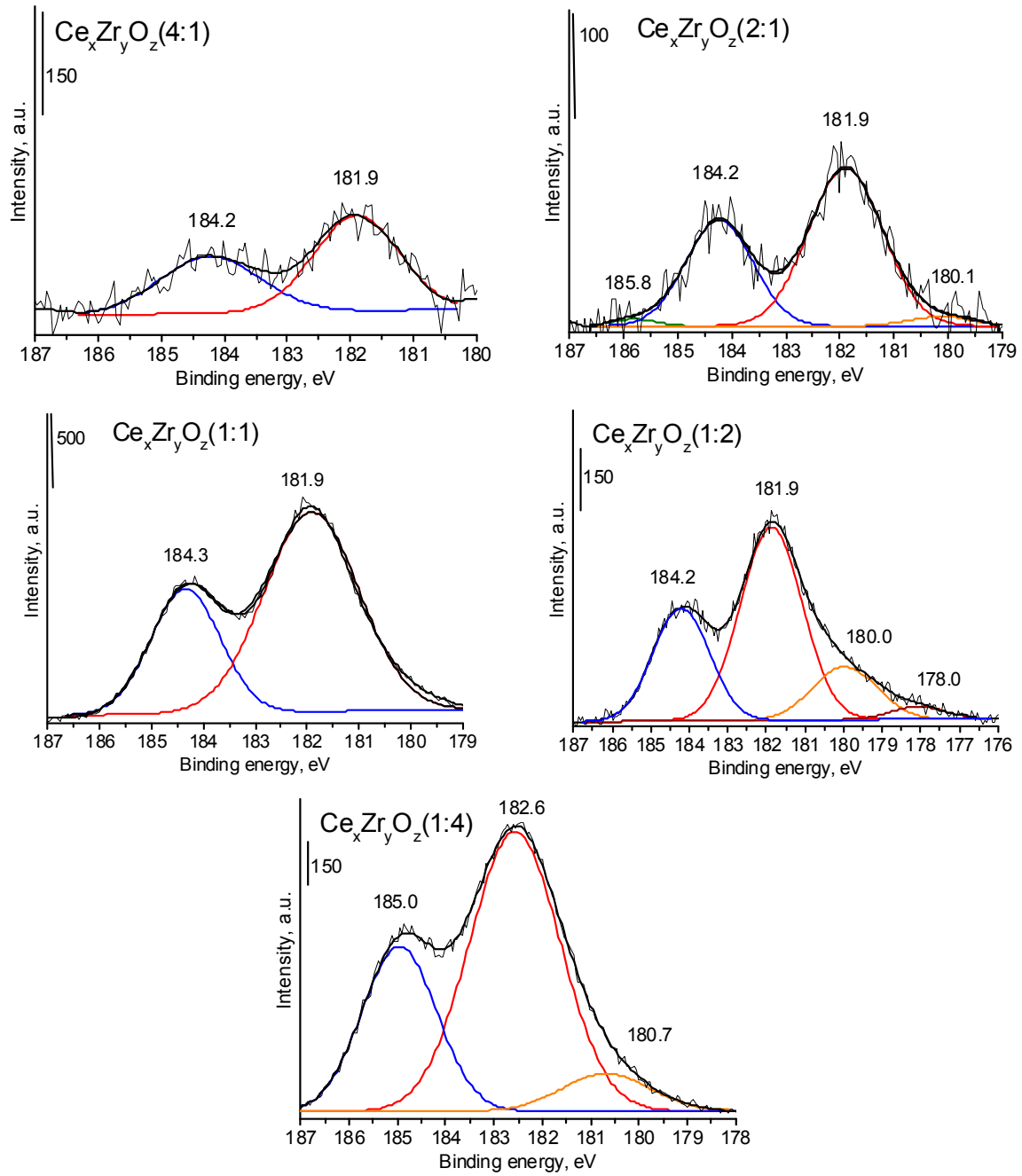


Figure S5. XP spectra recorded for Zr 3d species for Ce-Zr oxides.

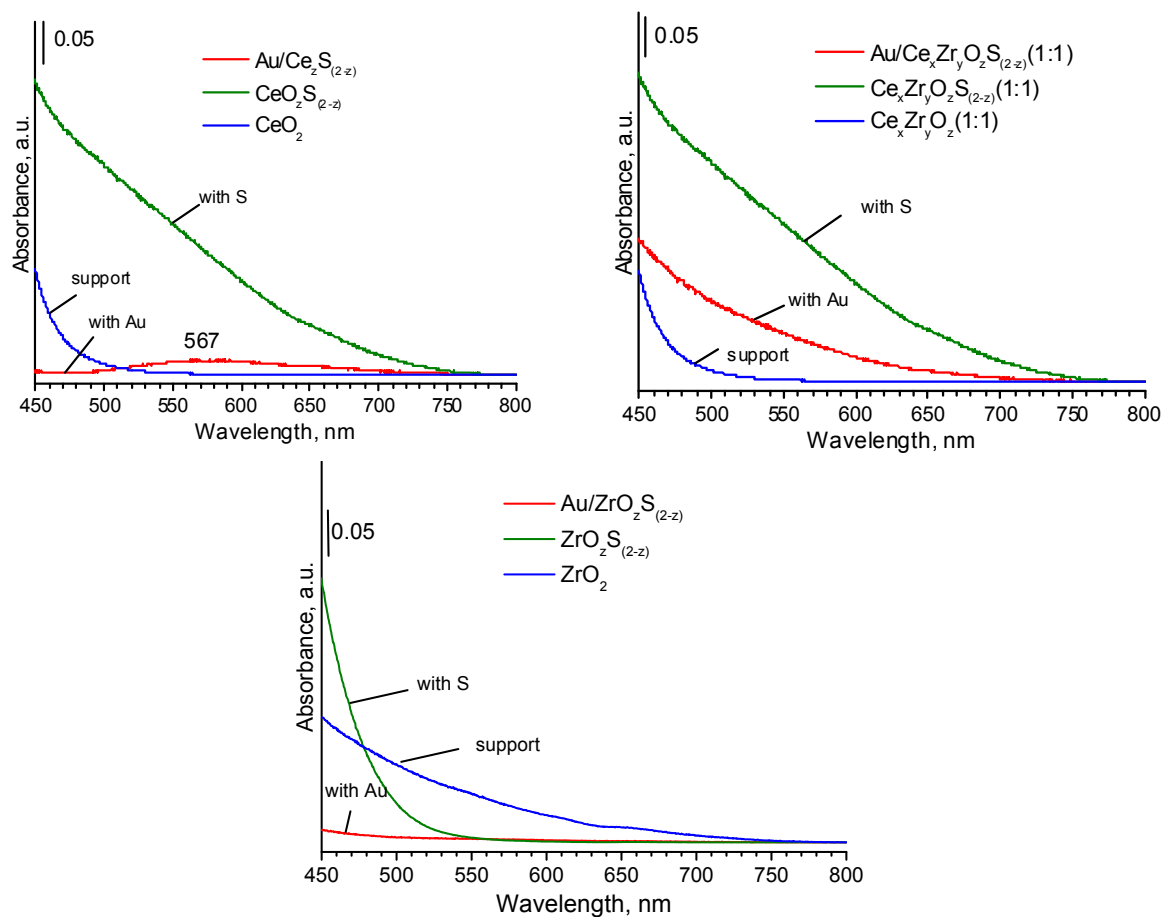


Figure S6. UV-vis spectra of samples before and after their modification of H₂S and after Au deposition for the spectral region of metallic gold species.

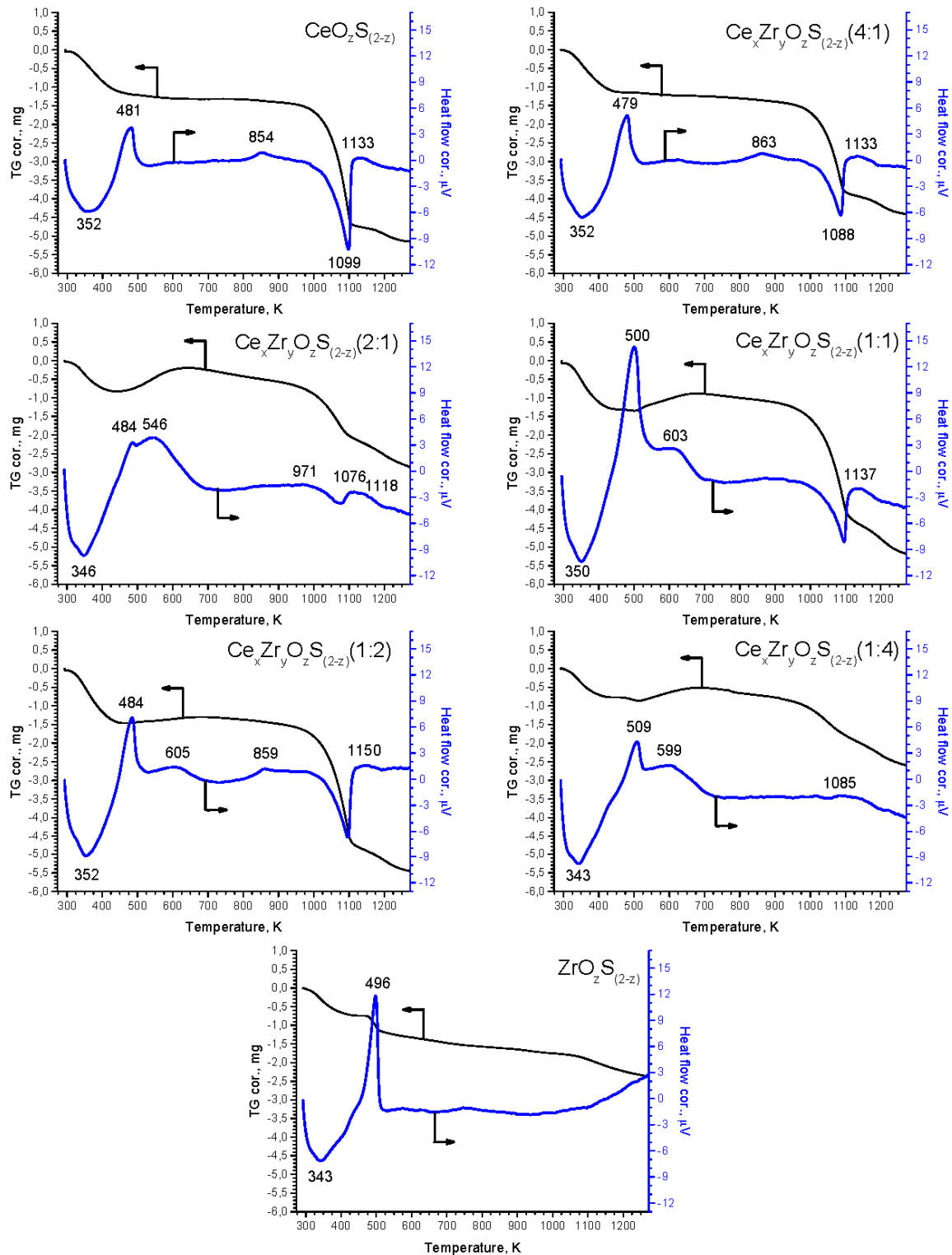


Figure S7. TG-DTA profiles of the oxides modified with sulfur species without gold species.

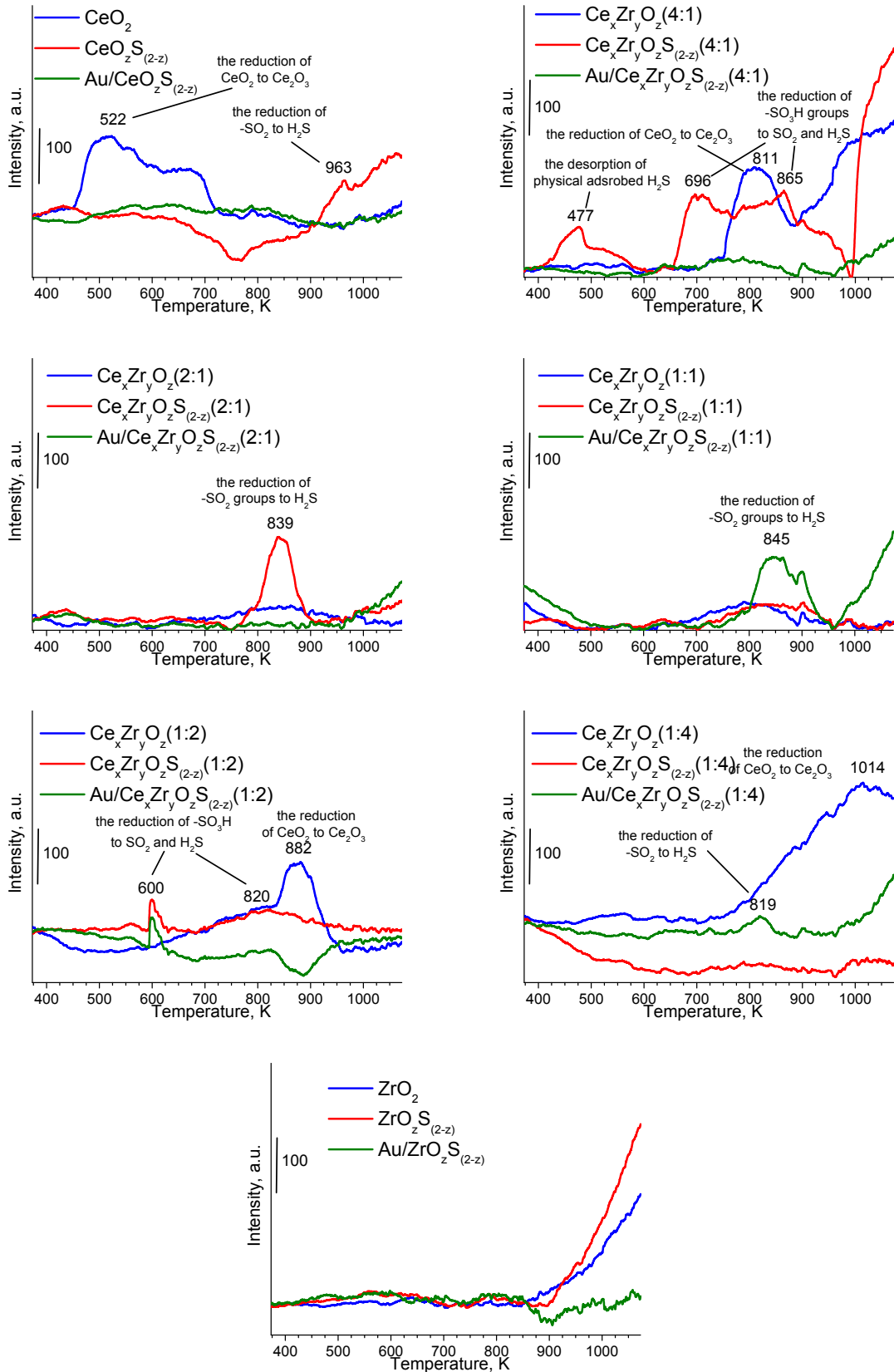


Figure S8. The TPR H₂ profiles performed for the catalysts.

