Supplementary Material

Catalytic oxidation of dimethyl disulfide (CH_3SSCH_3, DMDS) over bimetallic Cu-Au and Pt-Au catalysts supported on γ-Al_2O_3, CeO_2, and CeO_2-Al_2O_3

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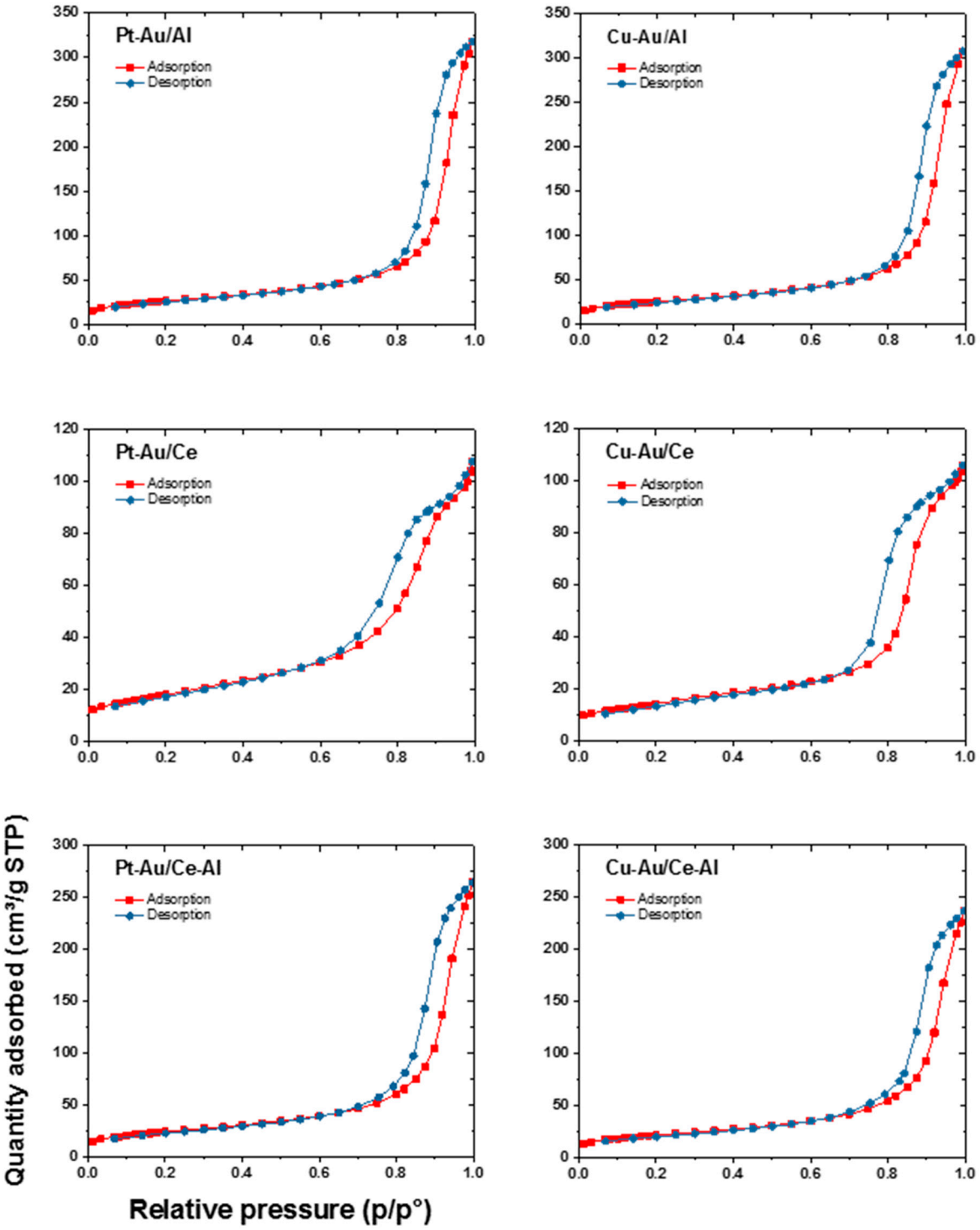

Figure S1. N_2 adsorption isotherms of the prepared bimetallic catalysts.

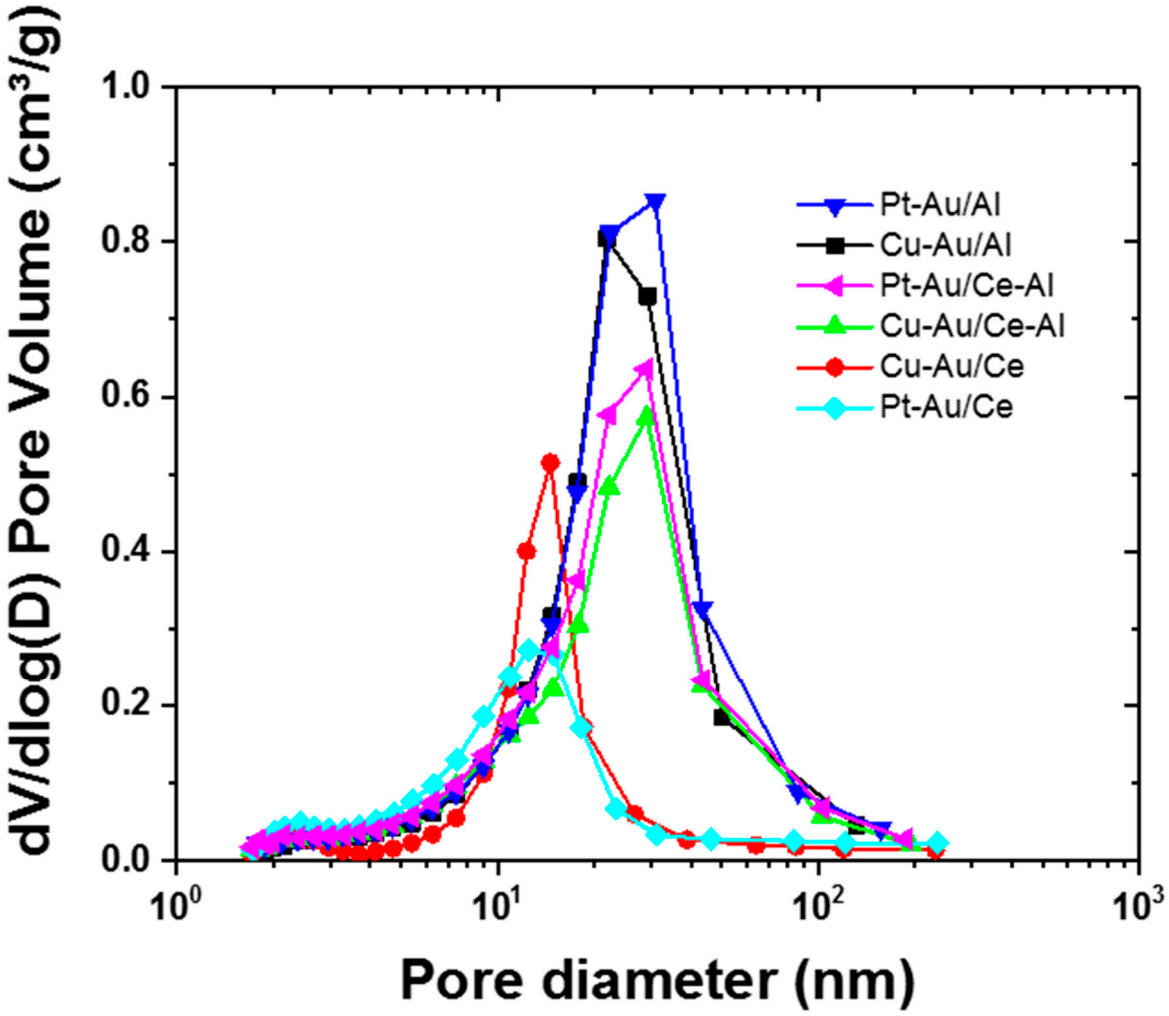

Figure S2. Pore size distributions of the prepared bimetallic catalysts.

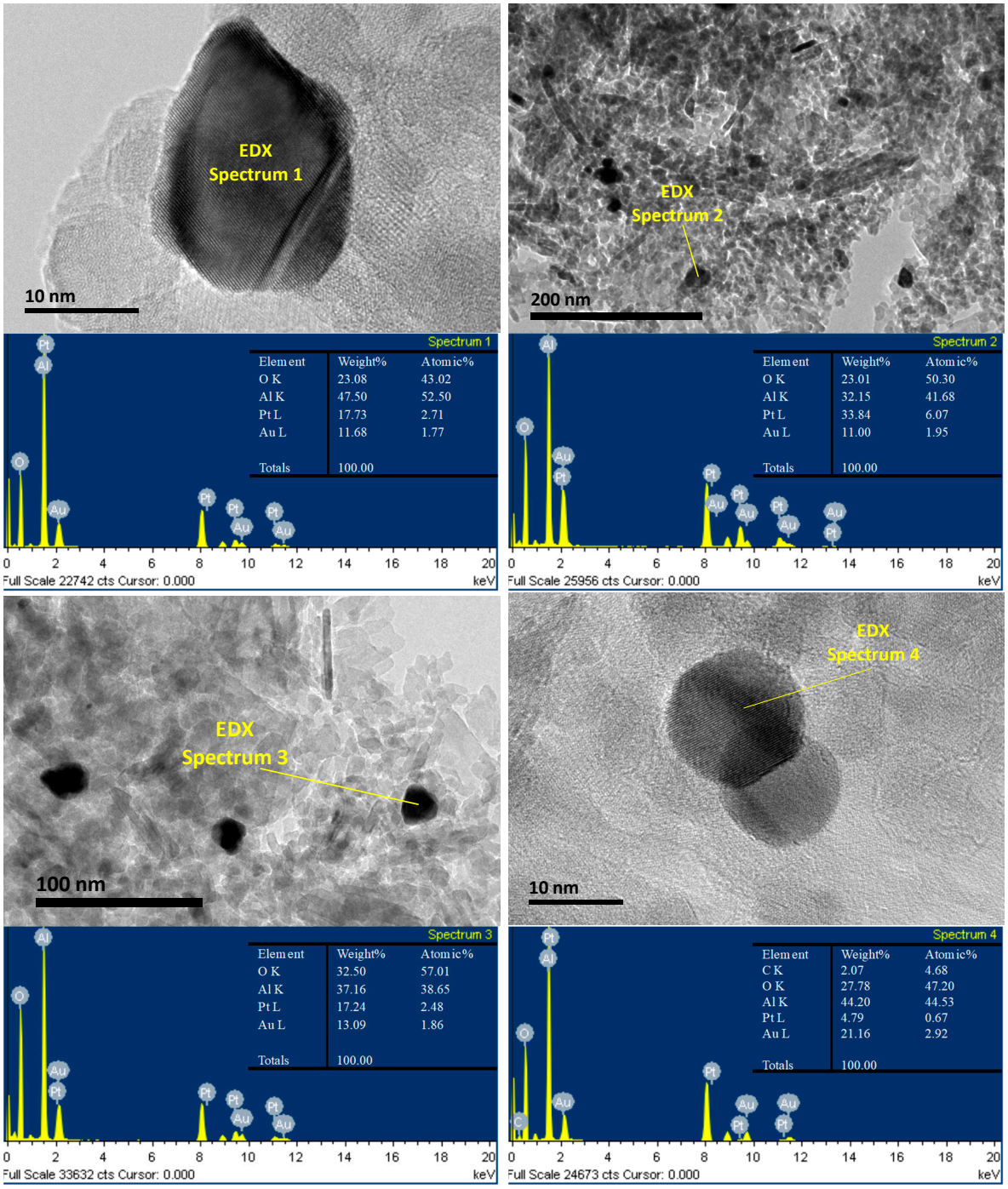

Figure S3. HR-TEM images of Pt-Au/Al catalyst showing examples of particles with their corresponding EDX data.

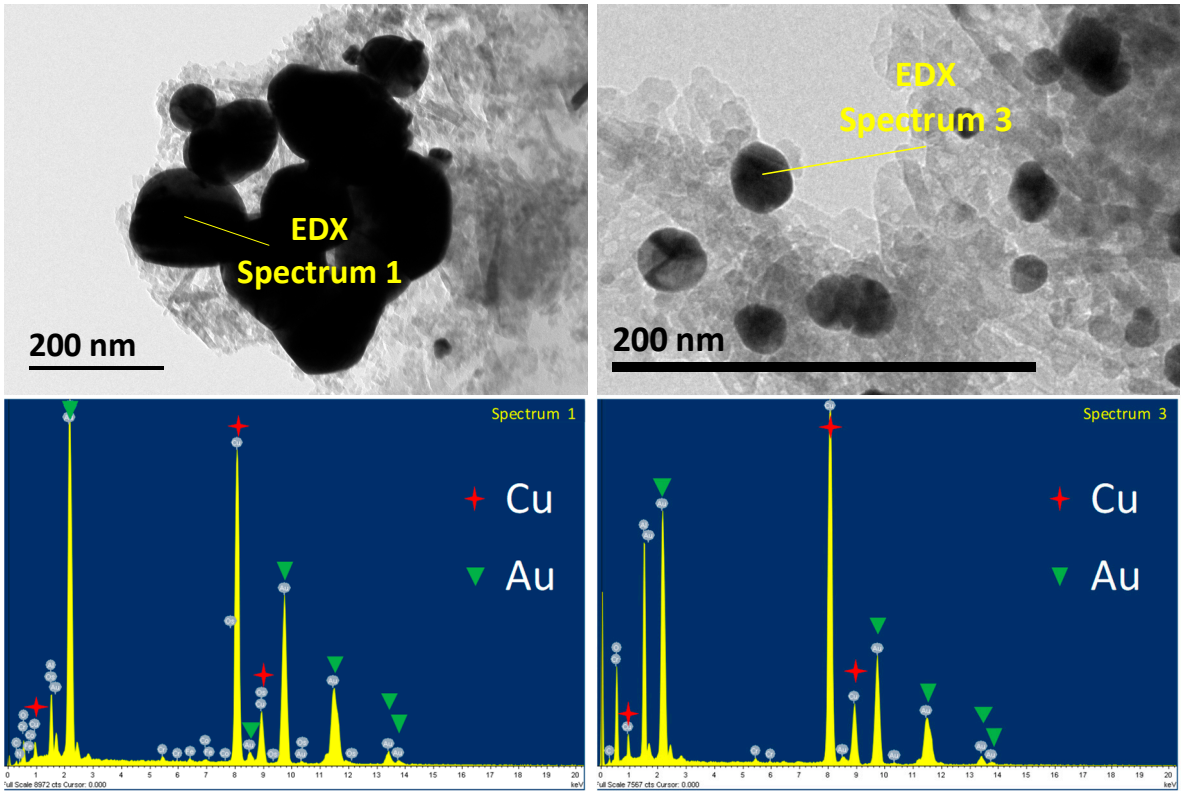

Figure S4. HR-TEM images of Cu-Au/Al catalyst showing examples of particles with their corresponding EDX data.

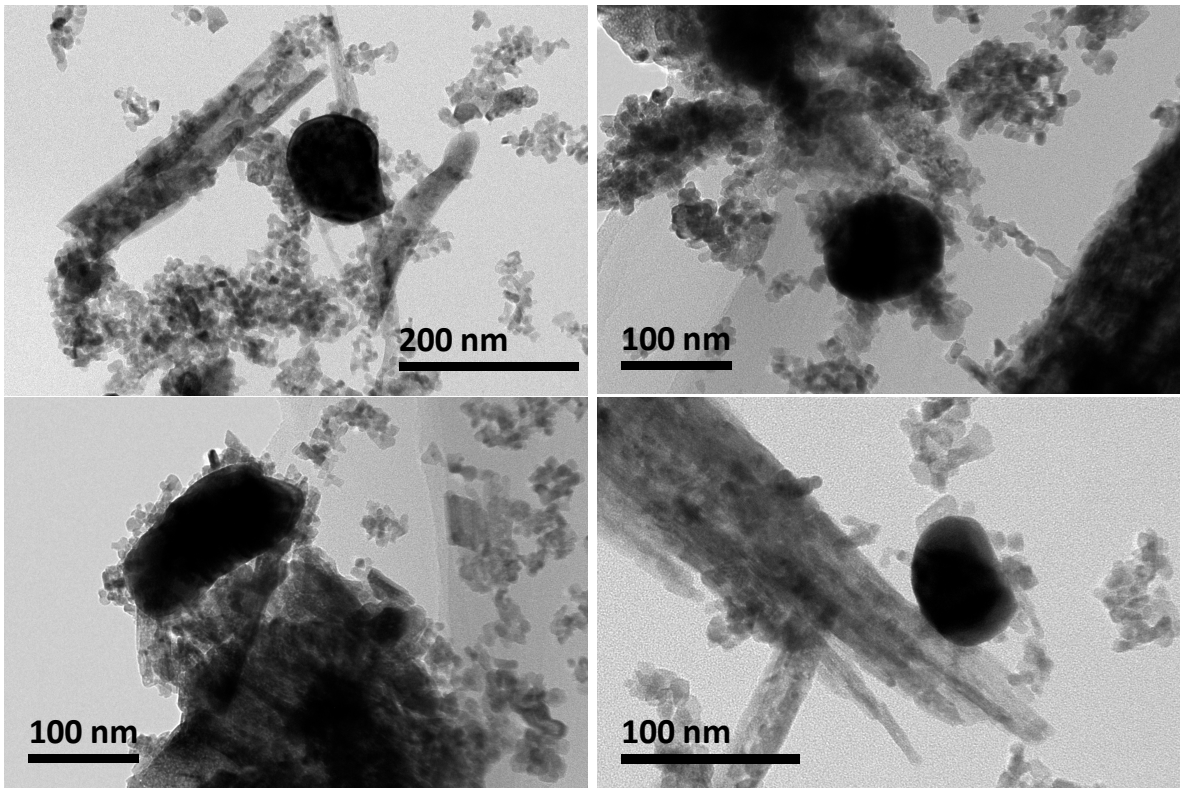

Figure S5. HR-TEM images of Pt-Au/Ce catalyst showing examples of particles.

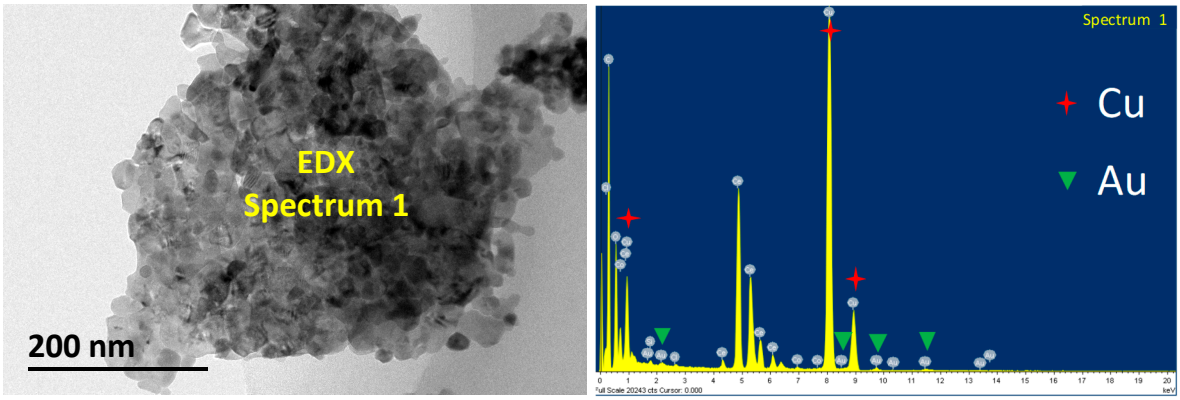

Figure S6. HR-TEM image of Cu-Au/Ce catalyst with corresponding EDX data.

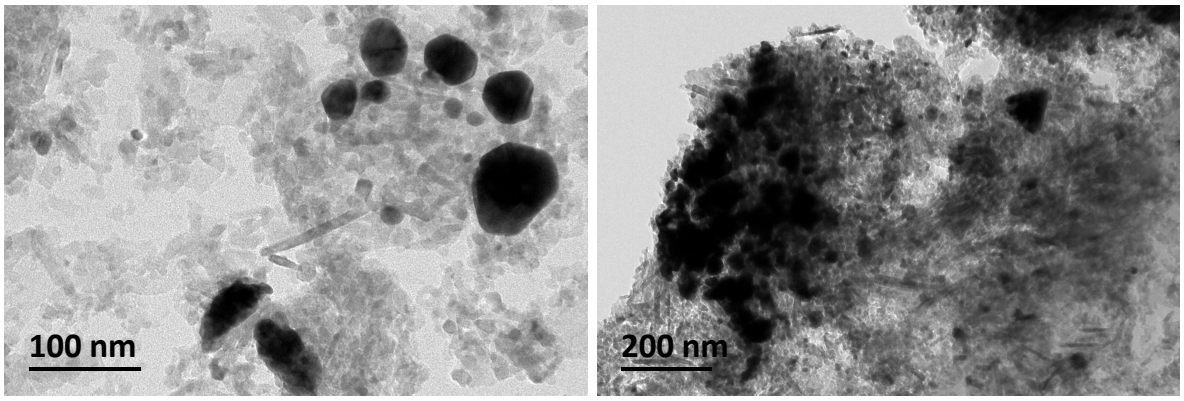

Figure S7. HR-TEM images of Pt-Au/Ce-Al catalyst showing examples of particles.

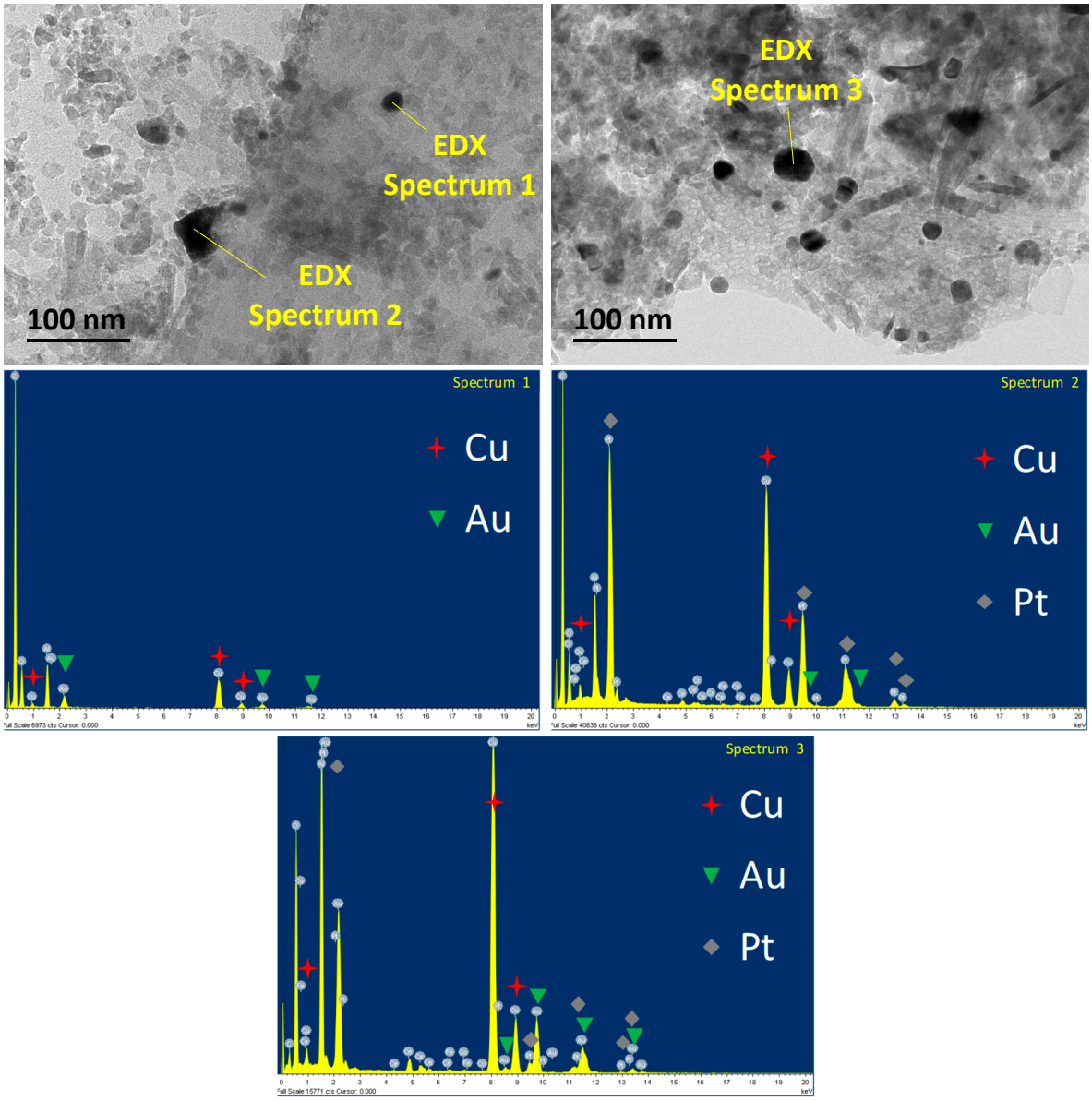

Figure S8. HR-TEM images of Pt-Au/Ce-Al catalyst showing examples of particles with their corresponding EDX data.

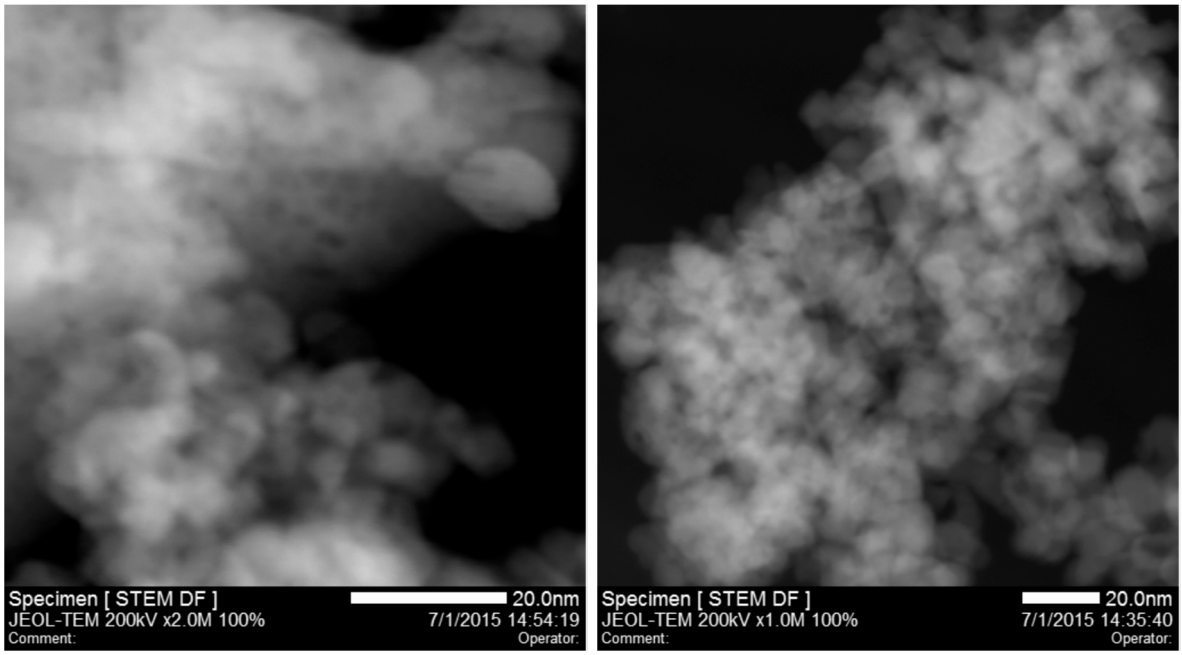

Figure S9. HAADF-STEM images of Pt-Au/Ce catalyst.

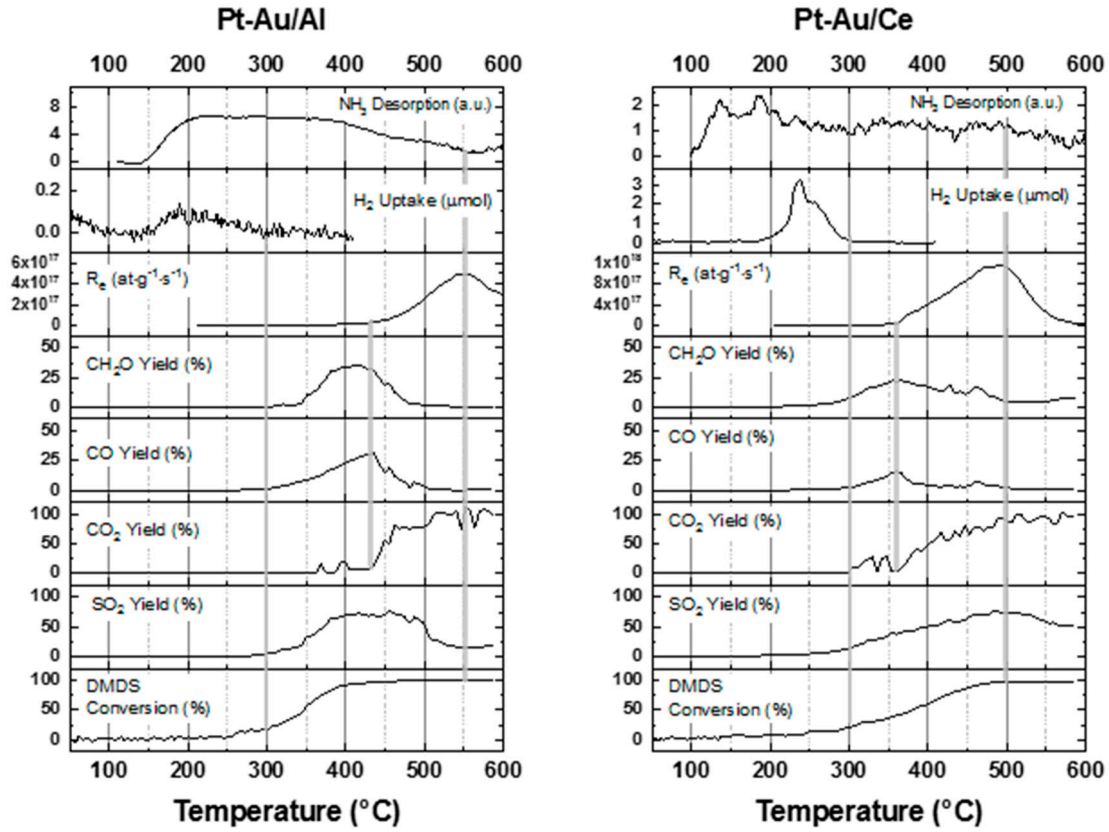

Figure S10. DMDS conversion, product yields (SO_2, CO_2, CO, and CH_2O), oxygen exchange rate, H_2 uptake, and NH_3 desorption results for the Pt-Au/Al and Pt-Au/Ce catalysts (Figure 15 shows corresponding graph for the Pt-Au/Ce-Al catalyst).

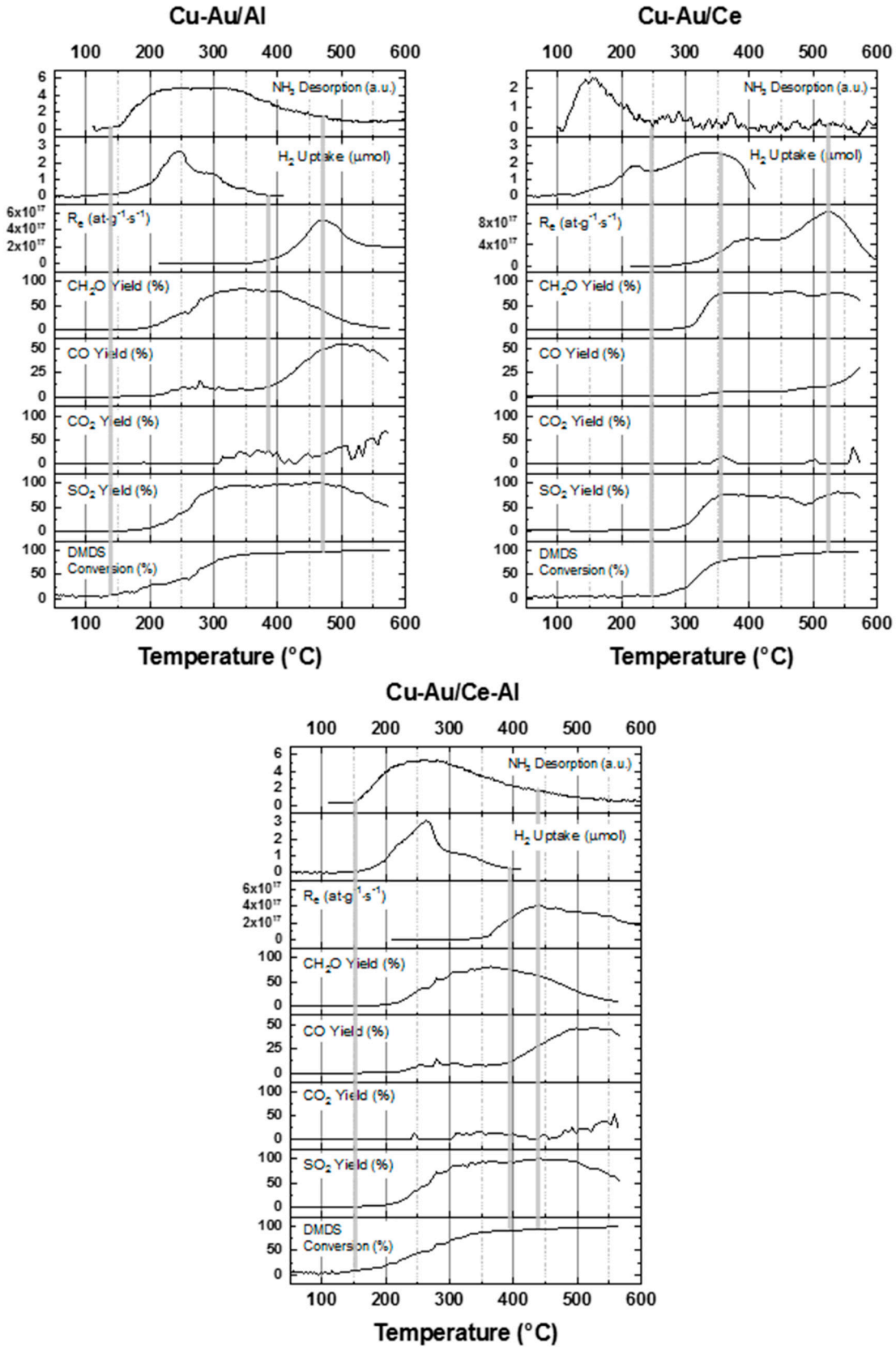

Figure S11. DMDS conversion, product yields (SO_2, CO_2, CO, and CH_2O), oxygen exchange rate, H_2 uptake, and NH_3 desorption results for the Cu-Au/Al, Cu-Au/Ce, and Cu-Au/Ce-Al catalysts.