Trimetallic Ni-based catalysts over gadolinia-doped ceria for green fuel production

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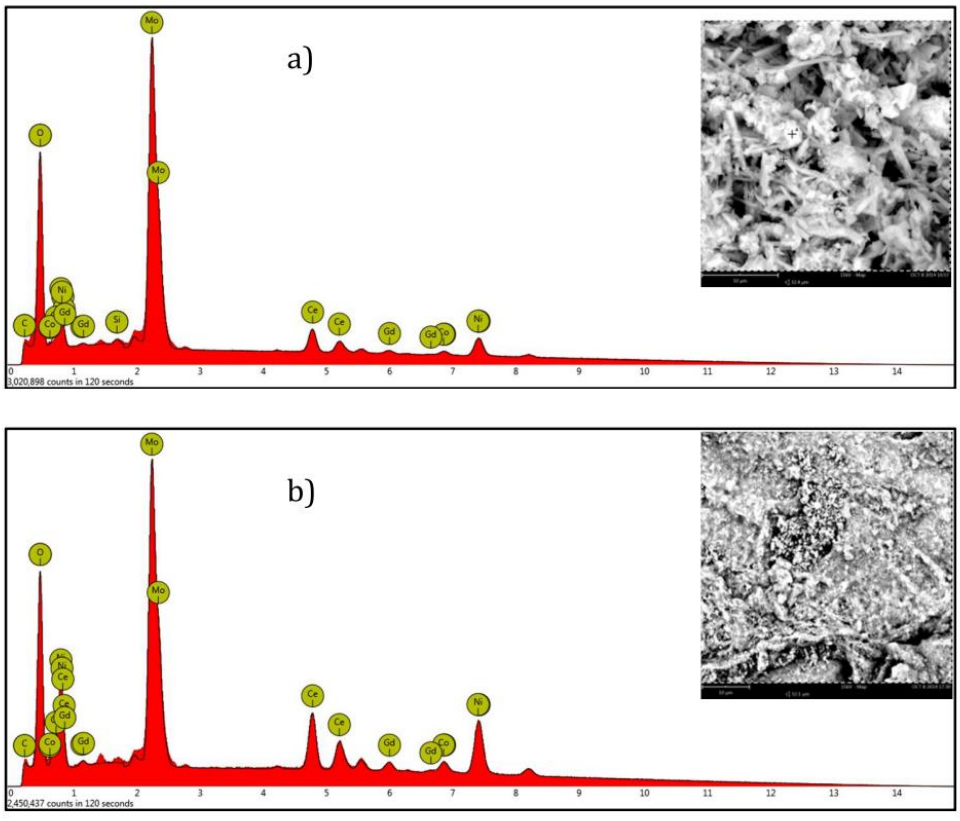


Figure S1. SEM-EDX images of NiMoCo/GDC catalyst surface (representative sample) – (a) after impregnation; (b) after calcination.

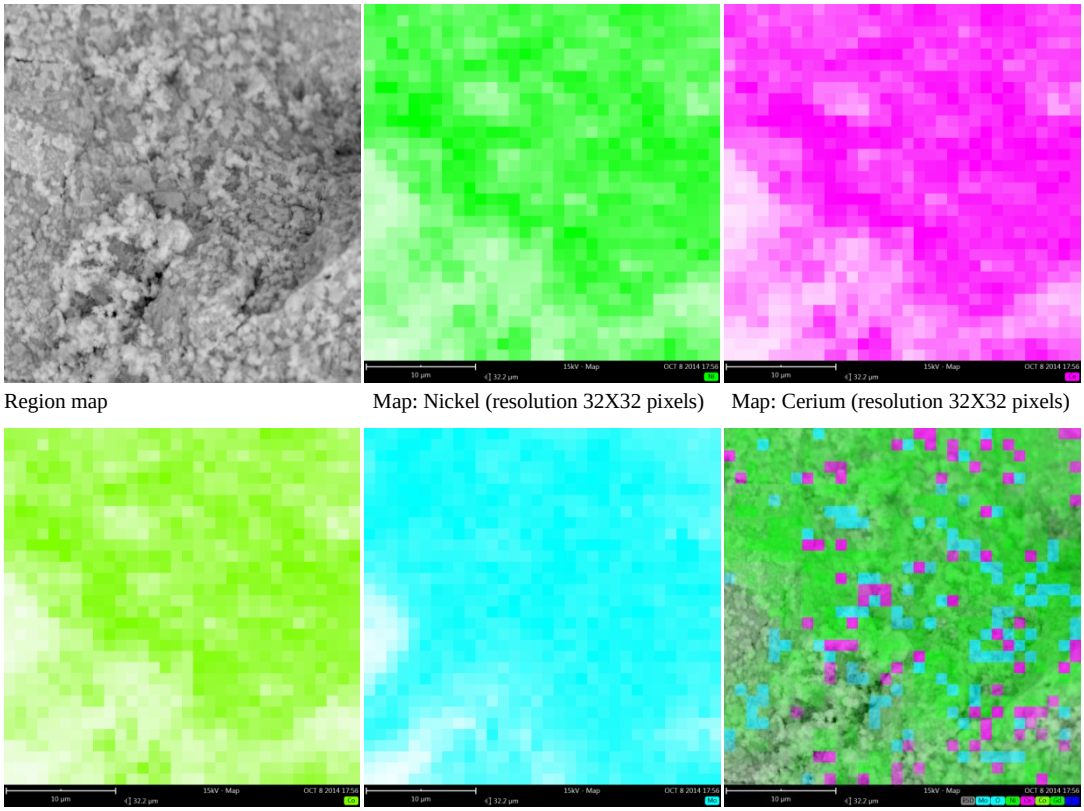


Figure S2. Elements mapping of NiMoCo/GDC catalyst surface after activation (representative sample).

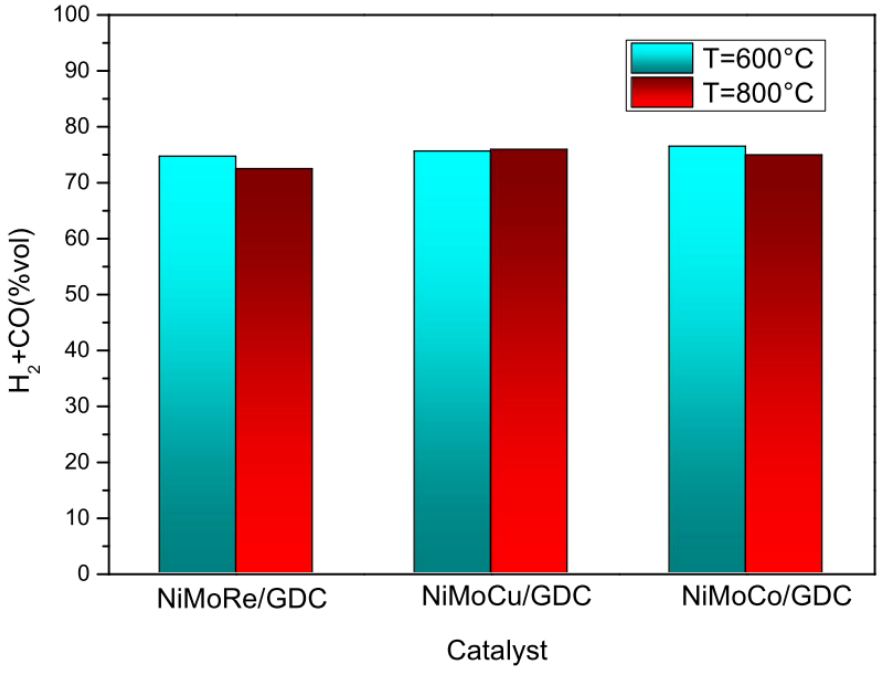


Figure S3. Selectivity to syngas (H_2 + CO) of different catalysts, at 600°C and 800°C, after 10 hours, 120,000 h^{-1} space velocity.

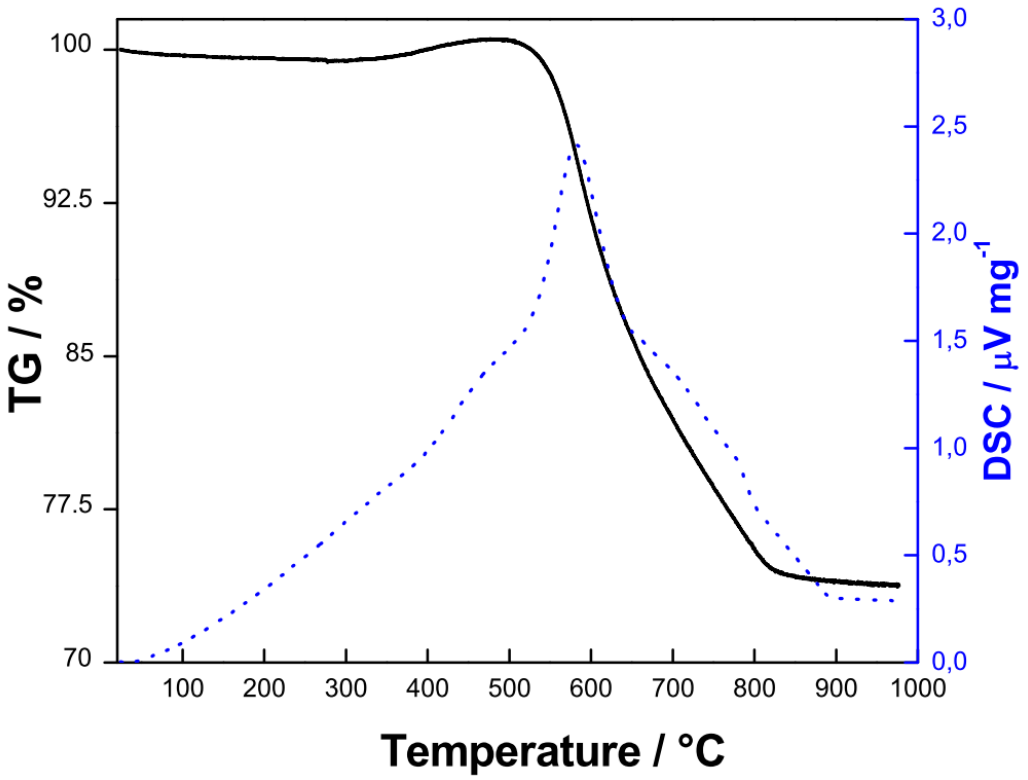


Figure S4. Thermal profiles, TG (black line) DSC (dotted line), of NiMoCu/GDC catalyst after ATR of ethanol at *T*=600°C, as representative sample.

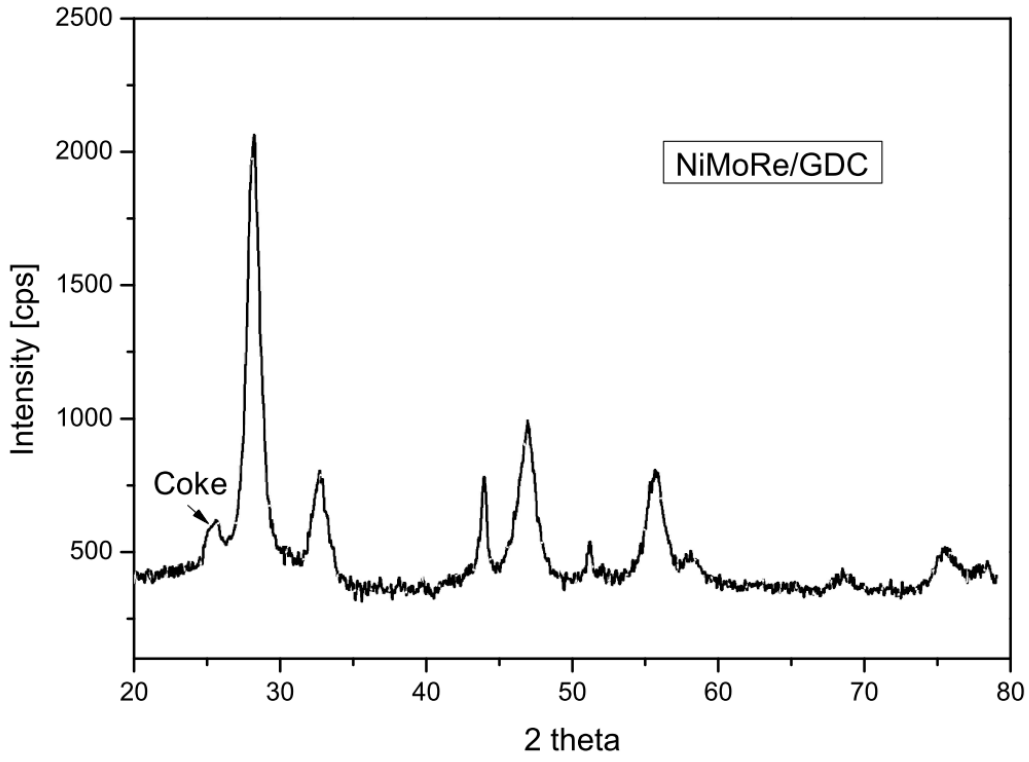


Figure S5. XRD spectrum of NiMoRe/GDC spent catalyst after 10 hours of ATR at *T*=600°C, without H_2S in the feed (representative sample).

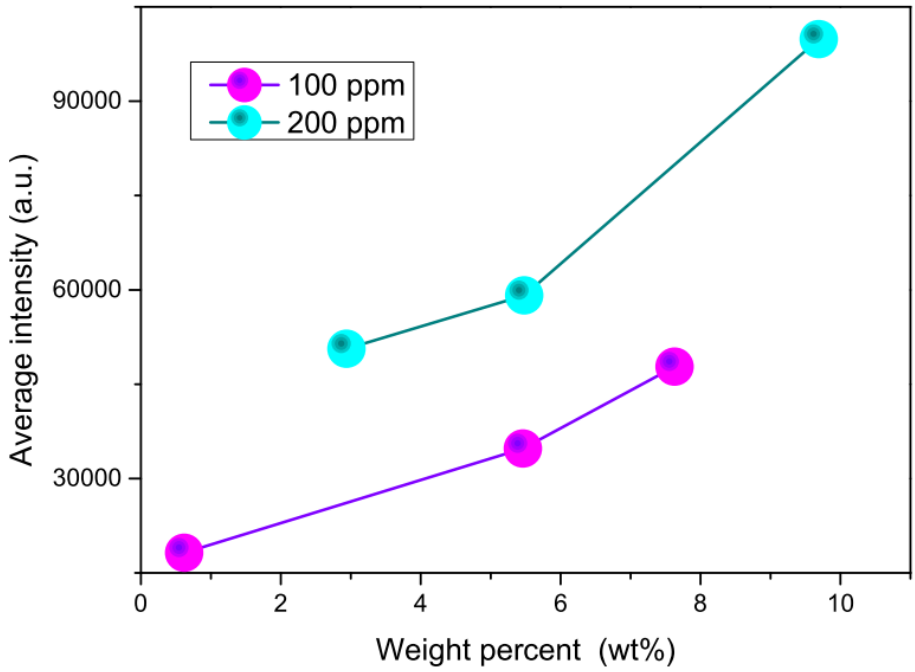


Figure S6. Correlation between the average intensity of the Csp^2 related Raman bands and the relative amount of deposited carbon, as assessed by thermo-gravimetric analysis.