

Supplementary Materials: The role of Neodymium in the optimization of a methane dry reforming catalyst of Ni supported on ceria and ceria-zirconia.

Alfonsina Pappacena, Rabil Razzaq, Carla de Leitenburg, Marta Boaro, A.Trovarelli

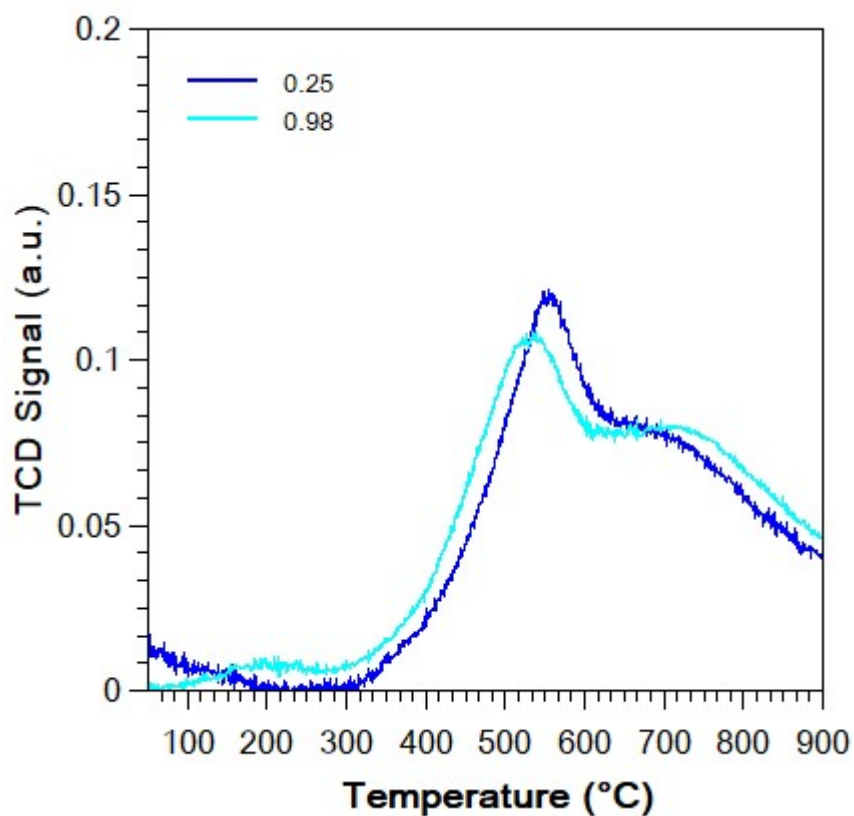


Figure S1: TPR of supports prepared with a different surfactant/cations molar ratio.

Table S1: XRD identified phases.

Samples	Phase	Lattice parameters (Å)
Ce	cubic	5.41015
CeZr	cubic	5.36722
CeZr_950	cubic	5.36199
CeNd _{0.2}	cubic	5.37311
CeZrNd _{0.2}	cubic	5.41657
CeZrNd _{0.2} _990	cubic	5.39639
CeZrNd _{0.07}	cubic	5.38063
CeZrNd _{0.07} _1030	cubic	5.37310

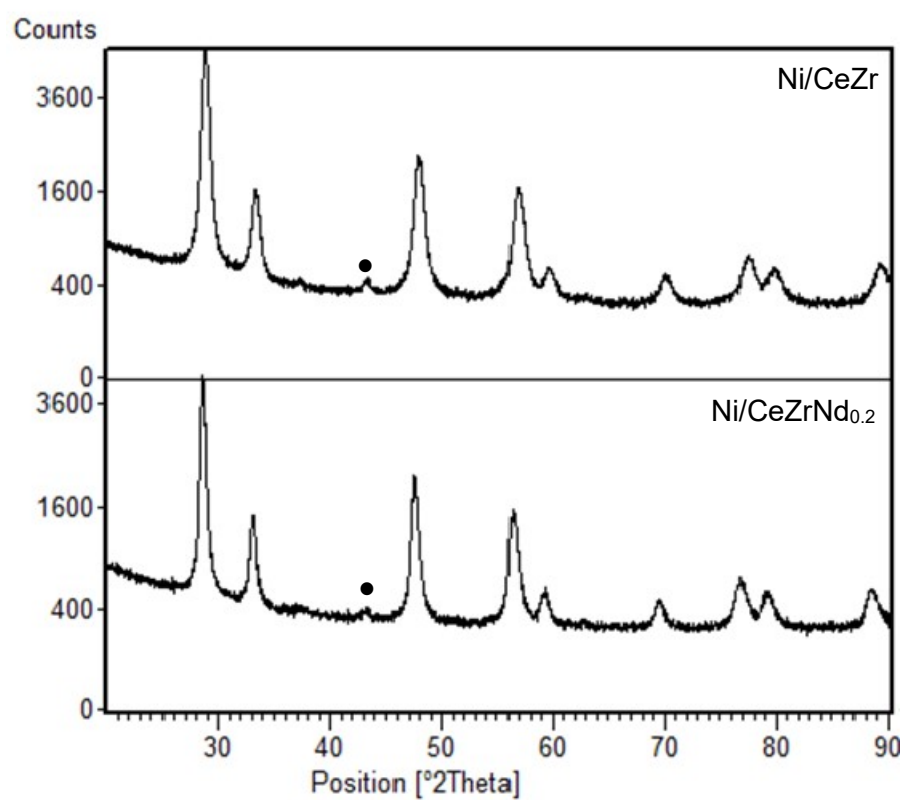
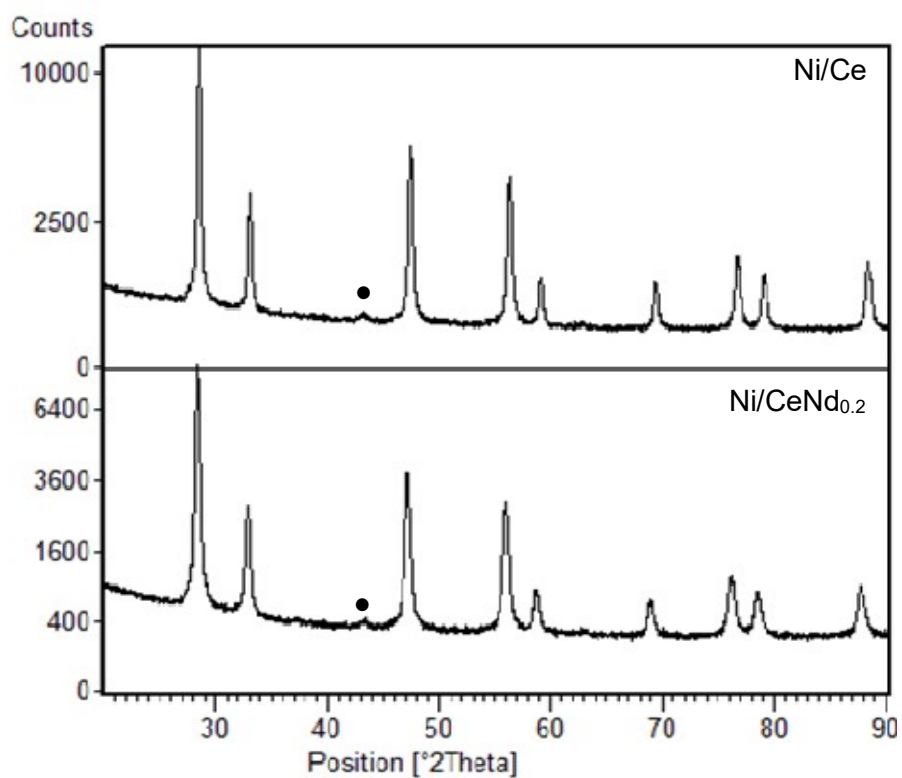


Figure S2: XRD of Ni catalysts; black dot indicates NiO phase

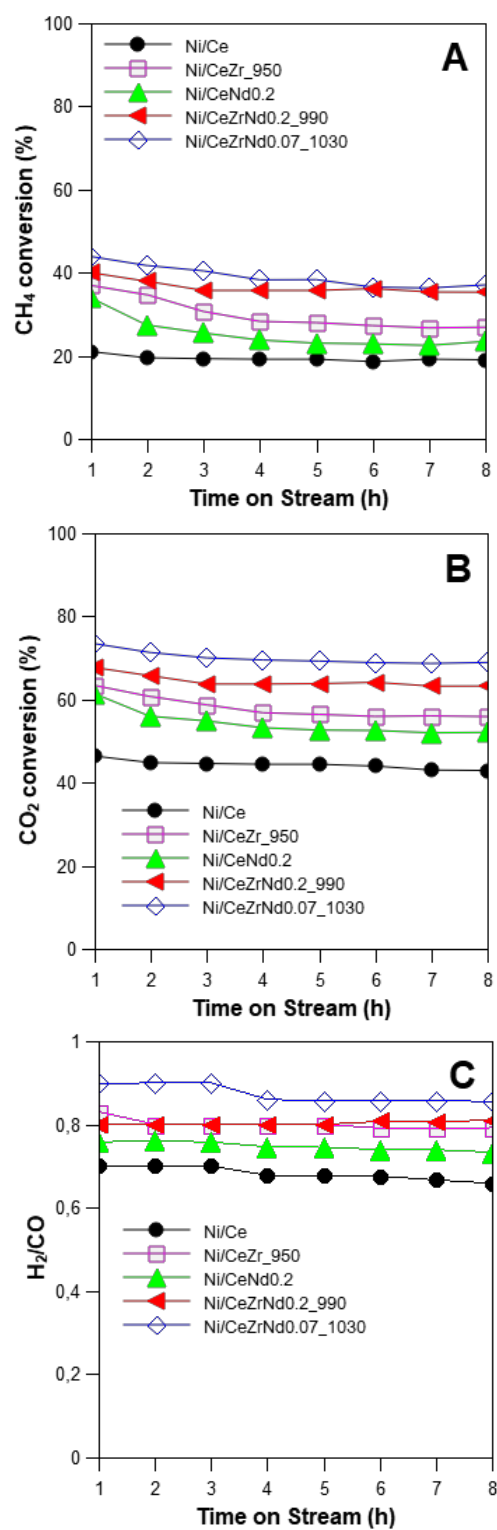


Figure S3: Endurance test at 650°C, (A) methane conversion, (B) CO₂ conversion, (C) S/C ratio.