

Electronic Supplementary Information

Figure S.1: XRD patterns of all seven fresh clalcined catalysts.



Figure S.2: EDX elemental line mapping of SD3M.



Figure S.3: Selectivity of H₂, based on CH₄, and CO, based on total feed (CO₂+CH₄), of all seven catalysts. Standard error (S.E.): S.E.(H₂-Sel.)=0.17%, S.E.(CO-Sel.)=0.35%.



Figure S.4: Yield of H₂, based on CH₄, and CO, based on total feed (CO₂+CH₄), of all seven catalysts.



Figure S.5: TGA/DSC analysis of all seven spent catalysts.