

Electronic Supplementary Information

Nanoporous Silicon Carbide as Nickel Support for the Carbon Dioxide Reforming of Methane

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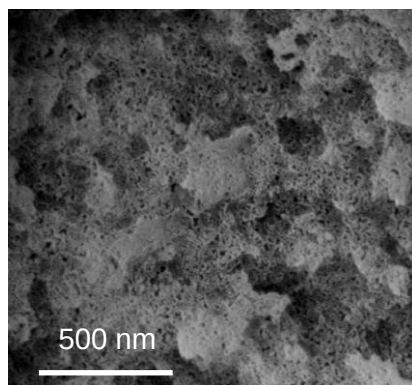


Figure S1. SEM image of the DUT-87 sample pyrolysed at 1500 °C

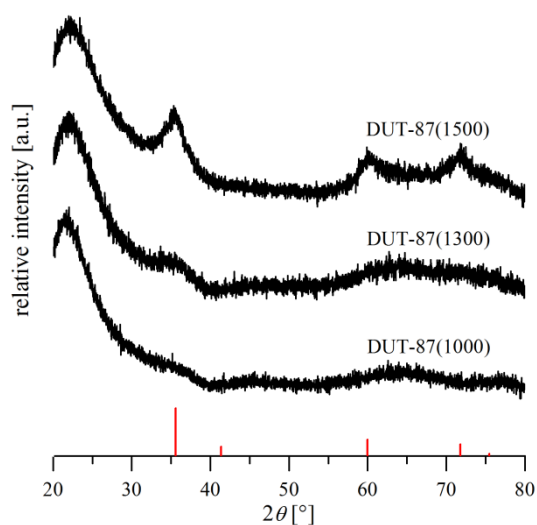


Figure S2. Powder X-ray diffraction patterns of the DUT-87 samples pyrolysed at 1000, 1300 and 1500 °C after the thermogravimetric analysis and in red the reference system β -SiC [29-1129]

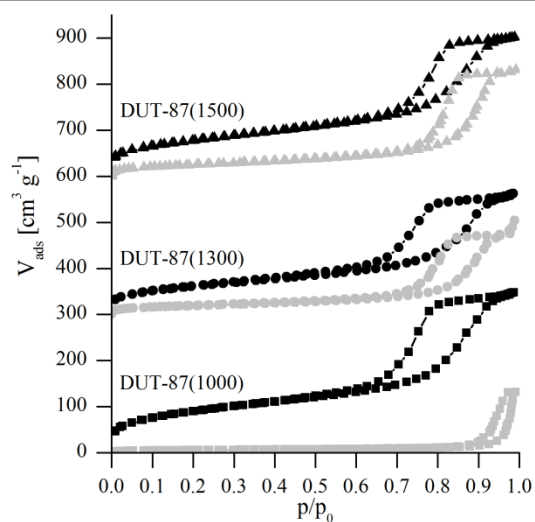


Figure S3. Nitrogen physisorption isotherms (77 K) of the silicon carbides DUT-87 pyrolysed at 1000, 1300 and 1500 °C (black) and of the same after the thermogravimetric analysis (grey) (offset per set of graphs: 300 cm³ g⁻¹)

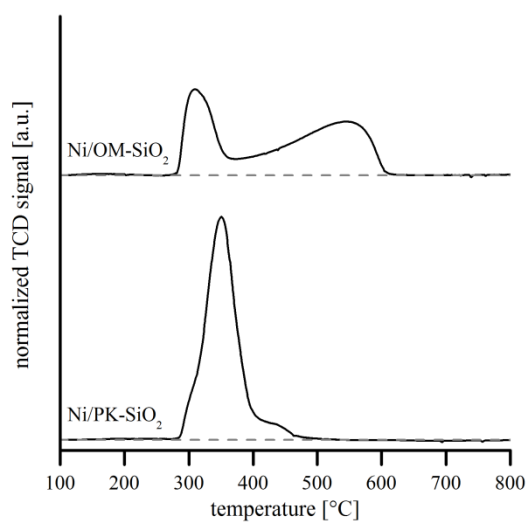


Figure S4. Results of the temperature-programmed reduction experiments for the reference systems Ni/PK-SiO₂ and Ni/OM-SiO₂; the grey lines depict the baseline

The hydrogen consumptions were 1.57 (Ni/PK-SiO₂) and 1.47 mmol g⁻¹ (Ni/OM-SiO₂).