SUPPORTING INFORMATION

Redox-reversible niobium-doped strontium titanate decorated with in-situ grown nickel nanocatalyst for high-temperature direct steam electrolysis

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Captions

Figure S1: XPS results of Sr (a1) and O (a2) in the oxidized STNNO sample; Sr (b1) and O (b2) in the reduced STNNO samples.

Figure S2: Rp of the electrolysis cells with cathodes based on STNO (a) and STNNO (b) in 5%H₂O/5%H₂/Ar (a) and 5%H₂O/Ar (b) under different applied potentials at 800°C.

Figure S3: The cross-sectional views of the symmetric cells based on YSZ/STNNO-SDC.

Figure S4: The Rp of the symmetric cells with the configuration STNO-SDC / YSZ/STNO-SDC and STNNO-SDC / YSZ/STNNO-SDC tested under different hydrogen partial.

Figure S5: The TEM (a), SEM and EDS (b) results of reduced STNNO sample.
Figure S1:
Figure S3:
Figure S4: