materials

MDPI

Supplementary Materials

NiYAl-Derived Nanoporous Catalysts for Dry Reforming of Methane

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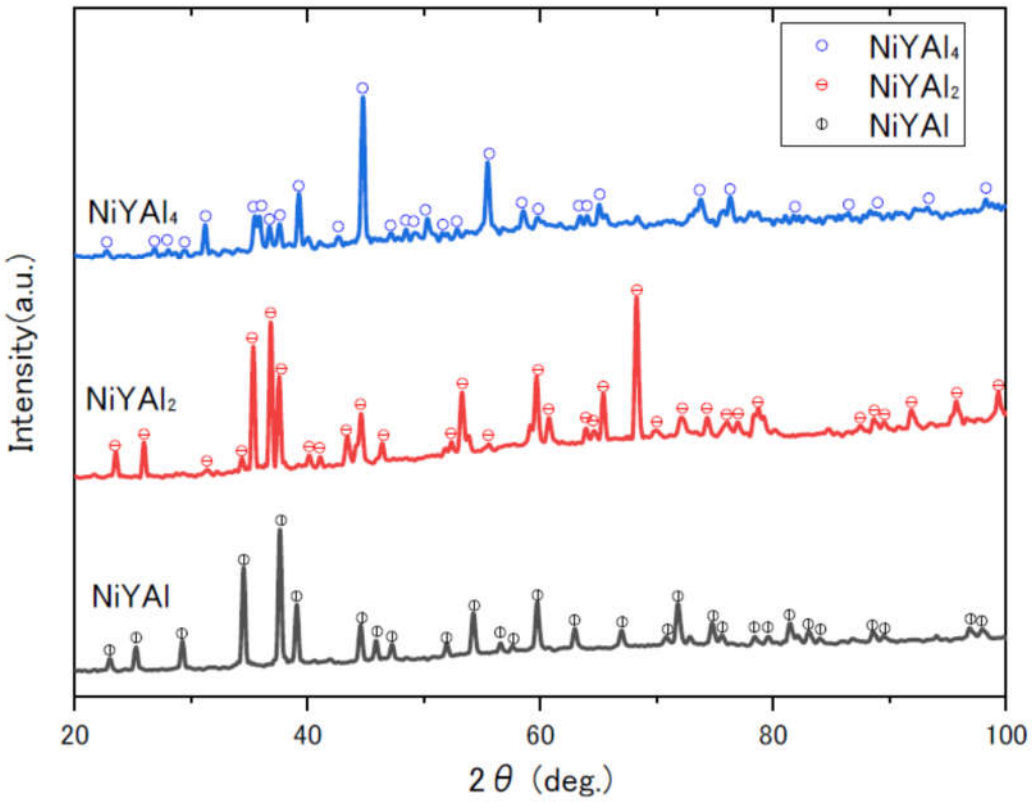

Figure S1. X-ray diffractograms of $NiYAl_4$, $NiYAl_2$, and NiYAl intermetallic precursors.

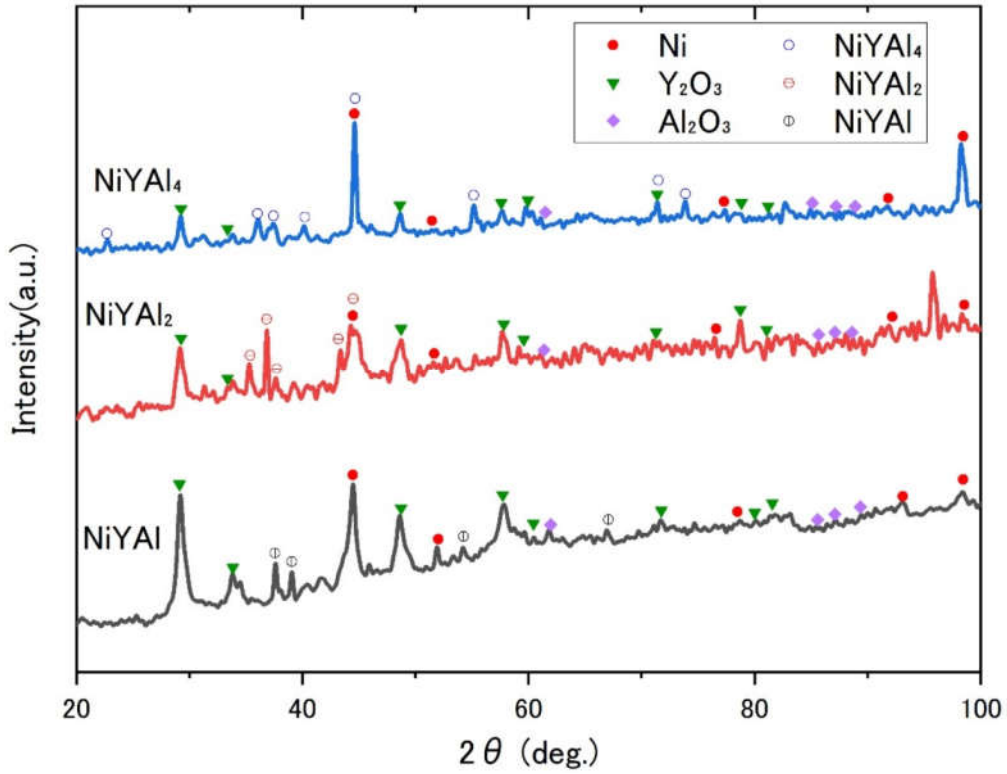

Figure S2. X-ray diffractograms of the $NiYAl_4$, $NiYAl_2$, and NiYAl samples obtained after the preferential oxidation with $CO + O_2$ gas mixture.

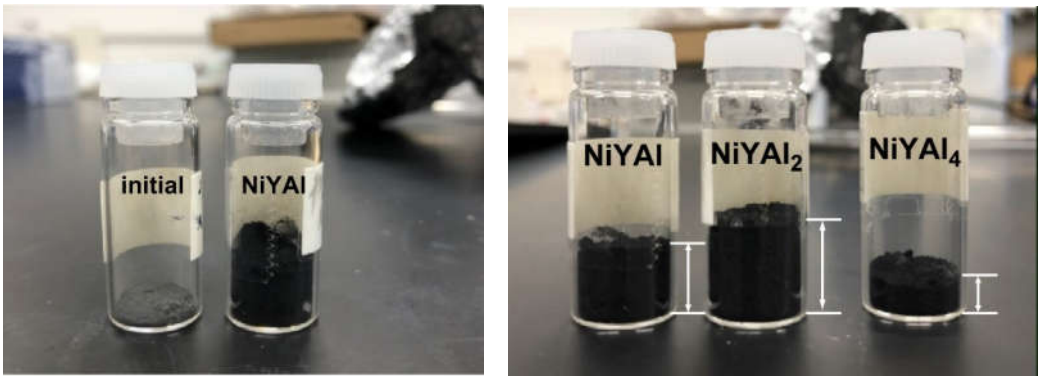

Figure S3. (left) Photograph of the initial and spent NiYAl-derived catalyst. The degree of carbon coking was estimated from the increase in volume between the initial and spent samples. (right) Photograph of the spent NiYAl-, $NiYAl_2$-, and $NiYAl_4$-derived catalysts. The initial $NiYAl_2$- and $NiYAl_4$-derived samples were similar in appearance to the initial NiYAl-derived catalyst.

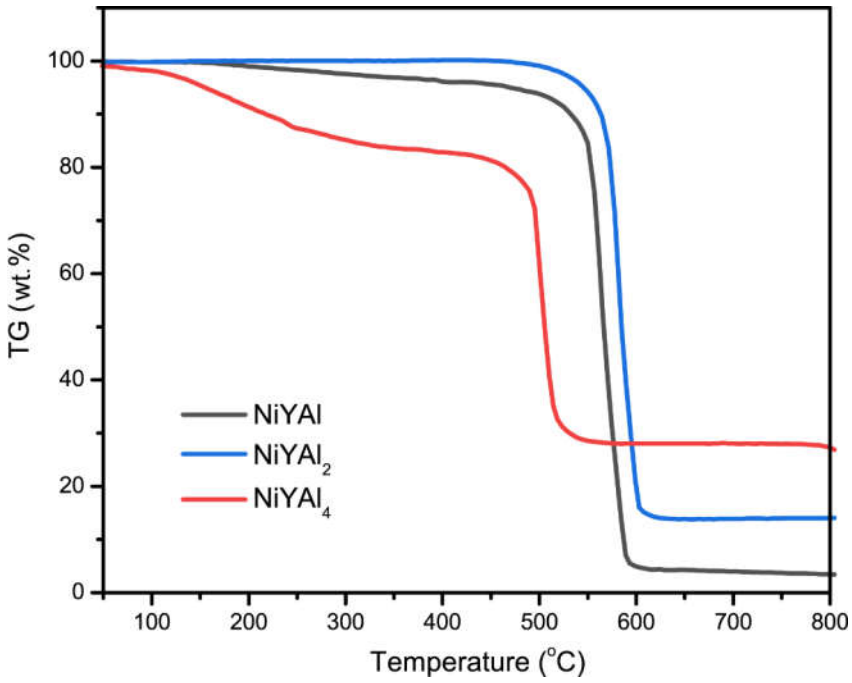

Figure S4. TG analysis of the spent catalysts derived from NiYAl, $NiYAl_2$, and $NiYAl_4$.