Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information for

The role of metal-support interaction for CO-free hydrogen from low temperature ethanol steam reforming on Rh-Fe catalysts

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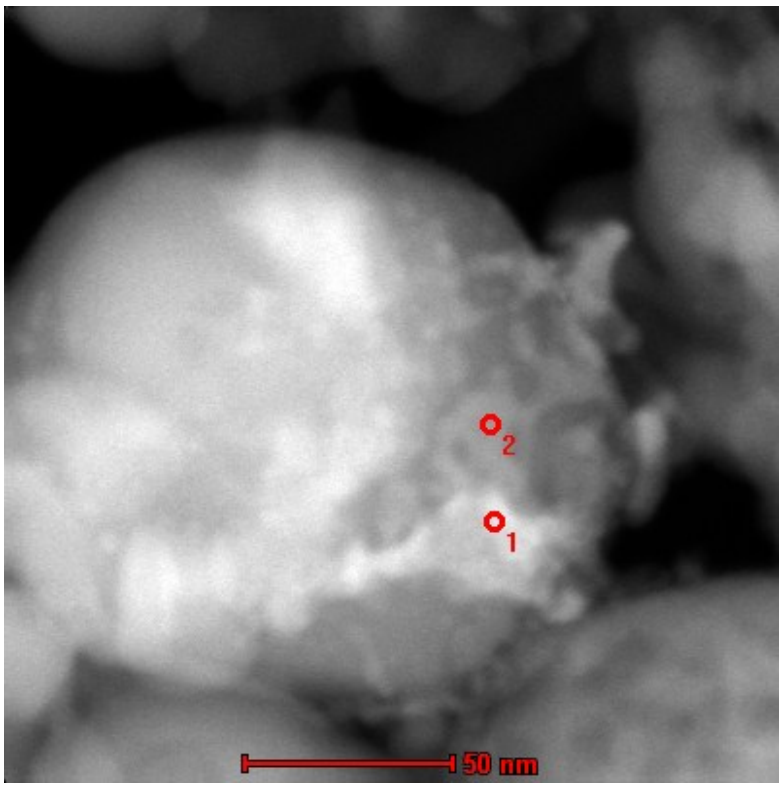

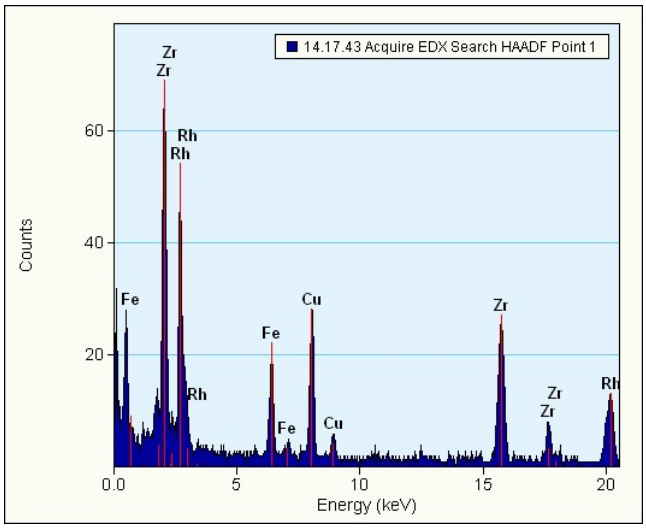

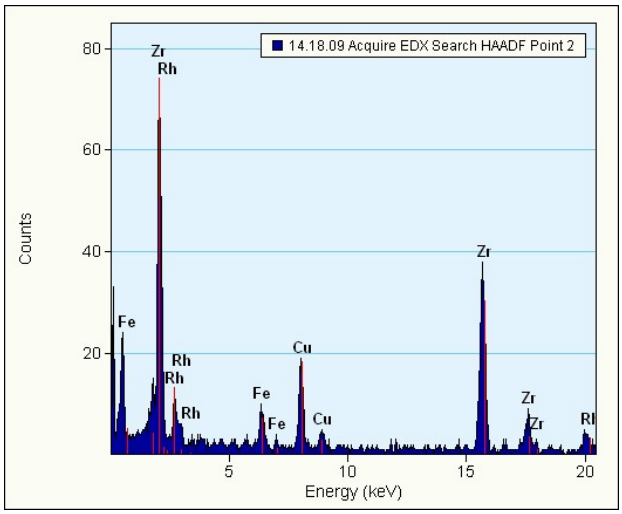

Fig. S1 Dark field image and EDX analysis on reduced Rh-Fe/ZrO_2.

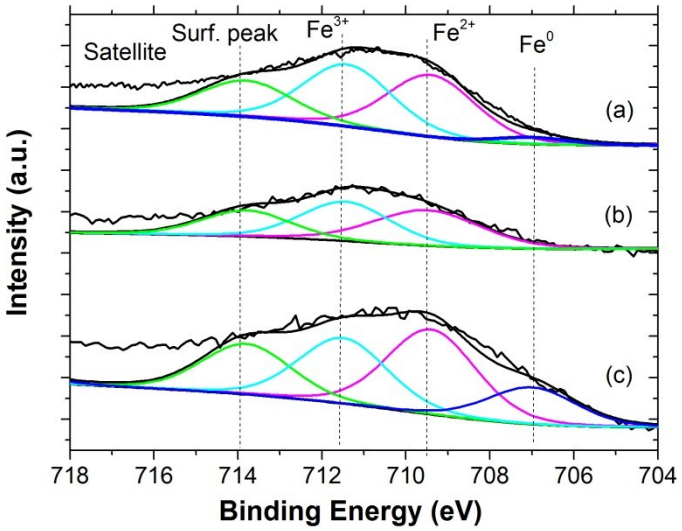

Figure S2. Fe 2p XPS spectra of reduced catalysts: (a) Rh-Fe/Ca-Al_2O_3; (b) Rh-Fe/MgO and (c) Rh-Fe/ZrO_2.

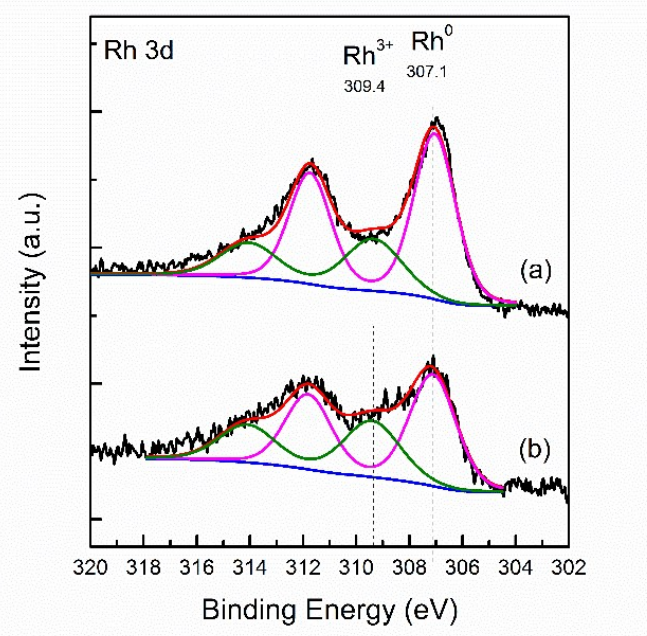

Figure S3. Rh 3d XPS spectra of reduced catalysts: (a) Rh/Ca-Al_2O_3 and (b) Rh-Fe/Ca-Al_2O_3.

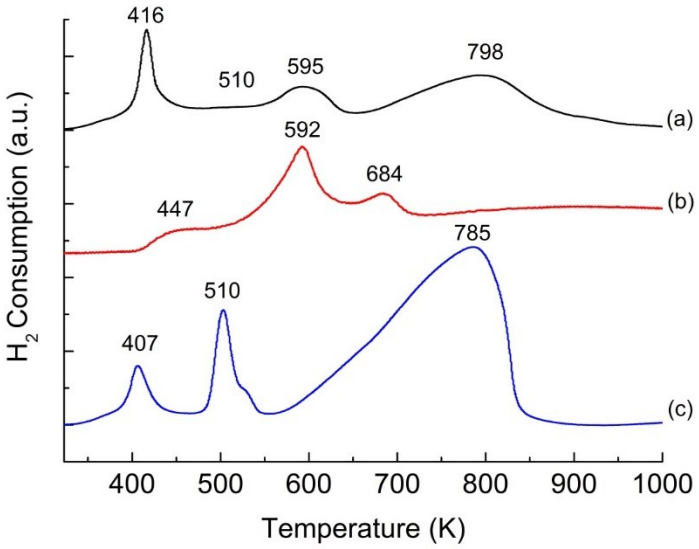

Figure S4. TPR profiles of calcined catalysts: (a) Rh-Fe/Ca-Al_2O_3, (b) Rh-Fe/MgO and (c) Rh-Fe/ZrO_2.

Table S1. Structural parameters determined from EXAFS analysis of the reduced Rh-Fe/ZrO_2 catalyst.

Rh-Fe/ZrO2	Fe-Fe1	Fe-Fe2	Fe-Rh
N	5.2 ± 0.5	2.3 ± 0.3	0.8 ± 0.2
R (Å)	2.48 ± 0.01	2.87 ± 0.01	2.59 ± 0.01
σ2 (Å)2	0.008 ± 0.001	0.009 ± 0.001	0.002 ± 0.0005
R-factor	0.031		