

Supporting information

Selective Hydrodeoxygenation of Lignin-Derived Phenols to Alkyl Cyclohexanols over Bifunctional Catalyst

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Table S1. pH values of the catalyst-water mixture.

Catalyst	pH
RuZr	6.37
RuMg	10.75
RuLa	7.87
RuZrLa-4	9.29
RuZrLa-2	9.30
RuZrLa-1	9.40

Table S2. The metal losses in the liquid residue.

Catalyst	Ru/%	Zr/%	La/%
RuZr	0.052	0.011	0
RuZrLa-4	0.049	0.007	0.125
RuZrLa-2	0.041	0.017	0.032
RuZrLa-1	0.047	0.018	0.061
RuLa	0.042	0	0.903

Table S3. Hydrogen desorption of catalysts.

Catalyst	H ₂ desorption/mmol(H ₂)*g(catalyst) ⁻¹
RuZr	0.355
RuZrLa-4	0.554
RuZrLa-2	0.610
RuZrLa-1	0.579
RuLa	0.517

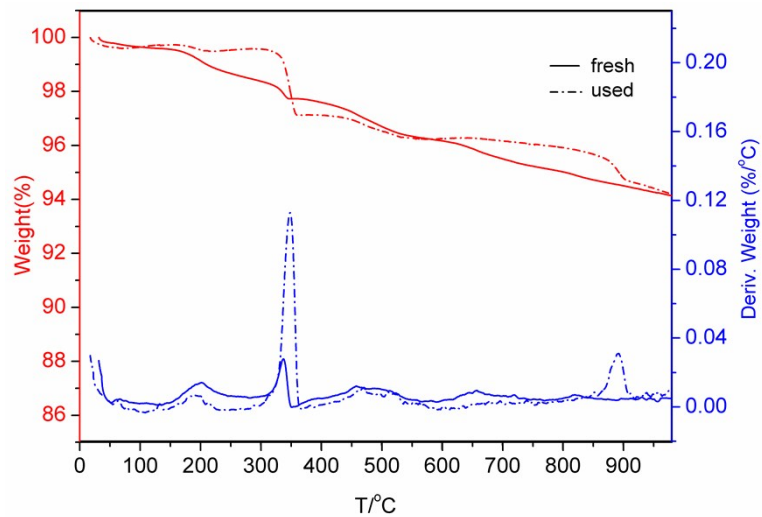


Figure S1. TGA curves of fresh and used RuZrLa-2 catalyst.

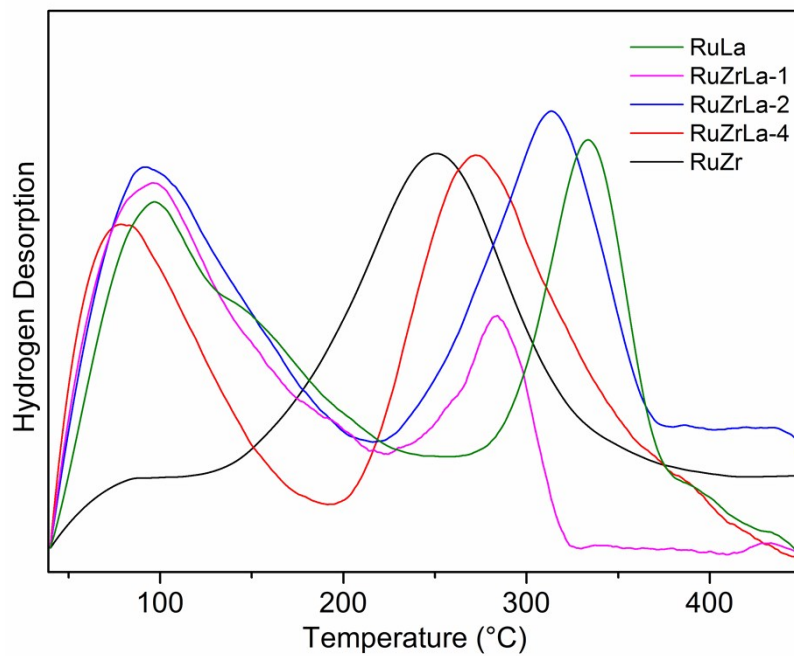


Figure S1. The H₂-TPD profiles of the catalysts.