

Supplementary Information

Dehydration of glucose/fructose to 5-Hydroxymethylfurfural (5-HMF) over an easily recyclable sulfated titania ($\text{SO}_4^{2-}/\text{TiO}_2$) catalyst

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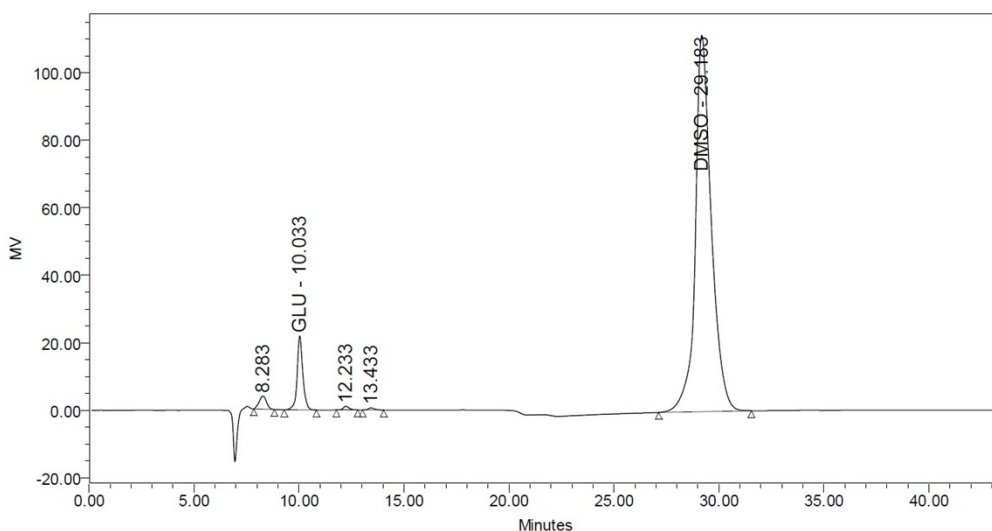


Fig. S1 HPLC chromatogram of the blank run (in absence of catalyst). Unknown products detected at the retention time of 8.283, 12.233, 13.433 minutes, respectively,

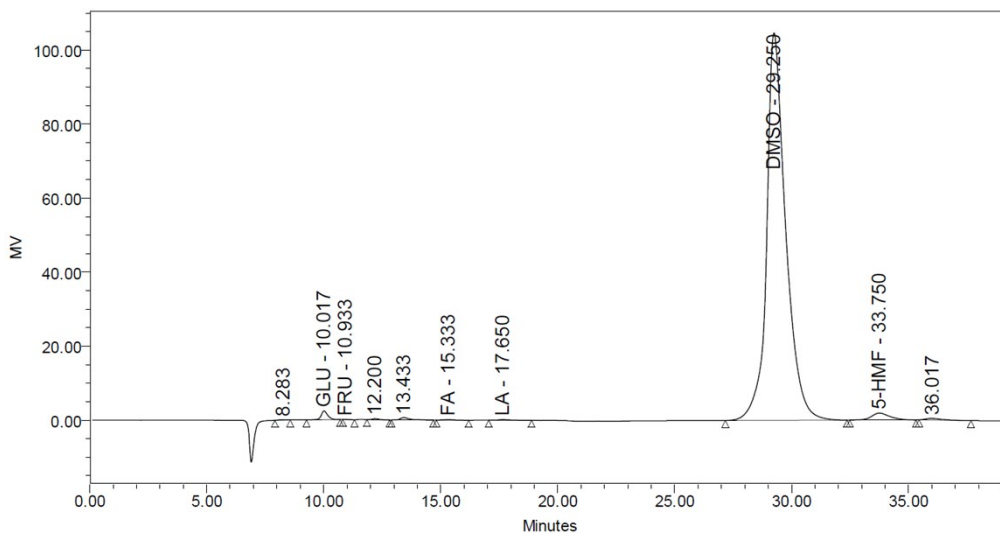


Fig. S2 HPLC chromatogram of the reaction mixture in presence of 0.5 M $\text{SO}_4^{2-}/\text{TiO}_2$ catalyst.

The main products detected and their retention time is as glucose at 10.017 min., fructose at 10.933 min., formic acid at 15.333 min, and levulinic acid at 17.650 min., 5-hydroxymethylfurfural at 33.750 min., respectively.

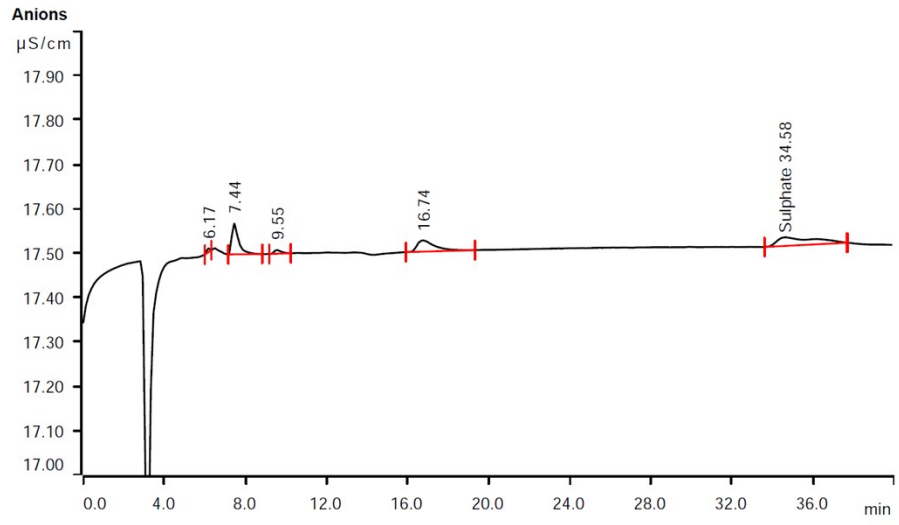


Fig. S3 Ion chromatogram of retentate