**Supplementary Information:**

**Fructose conversion, yield and selectivity of each product formed**

Fructose conversion was calculated by the ratio between the difference in the initial fructose concentration minus the concentration of the final fructose and the initial concentration, according to Equation 1, in which C(%) = fructose conversion; Co = initial concentration of fructose (mol/L); Cf = final concentration of fructose (mol/L).

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C (%) = x 100 (1)

The yield of each soluble product obtained and duly identified was calculated according to Equation 2, in which Ri (%) = Yield of product i; Ci= concentration obtained from product i (mol/L); C0 = initial fructose concentration.

Ri (%) = x 100 (2)

The selectivity of each product was calculated according to Equation 3, in which Si (%) = Selectivity of product i; C*i* = concentration of product i; Ci1, Ci2, Ci3, Ci4, Ci5 = concentration of other products (mol/L).

Si (%)= (3)

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**Figure S1.** Thermal profiles (TG) of the catalysts: (a) Sn(PPT), Sn(CTAB) and Sn(GLY); (b) Nb(PPT), Nb(CTAB) and Nb(GLY) and (c) SnNb(PPT), SnNb(CTAB) and SnNb(GLY).

Gráfico

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**Figure S2.** FTIR spectra using pyridine as probe molecule: (a) Sn(PPT), Sn(CTAB) and Sn(GLY); (b) Nb(PPT), Nb(CTAB) and Nb(GLY) and (c) SnNb(PPT), SnNb(CTAB) and SnNb(GLY).

|  |  |
| --- | --- |
|  |  |
| **Sn(PPT)↑** | **Nb(PPT)↑** |
|  |  |
| **Sn(CTAB)↑** | **Nb(CTAB)↑** |
|  |  |
| **Sn(GLY)↑** | **Nb(GLY)↑** |

**Figure S3.** Selectivity for soluble products identified in the fructose conversion at 150 °C using 1.5 x 10-3 g of catalyst Fructose conversion at 150 °C using (a) Sn(PPT) and Nb(PPT); (b) Sn(CTAB) and Nb(CTAB); (c) Sn(GLY) and Nb(GLY).