Supplemental materials for:

P-Hydroxybenzenesulfonic Acid-Formaldehyde Resin Solid Acid for Conversion of Fructose and Glucose to 5-Hydroxymethylfurfural

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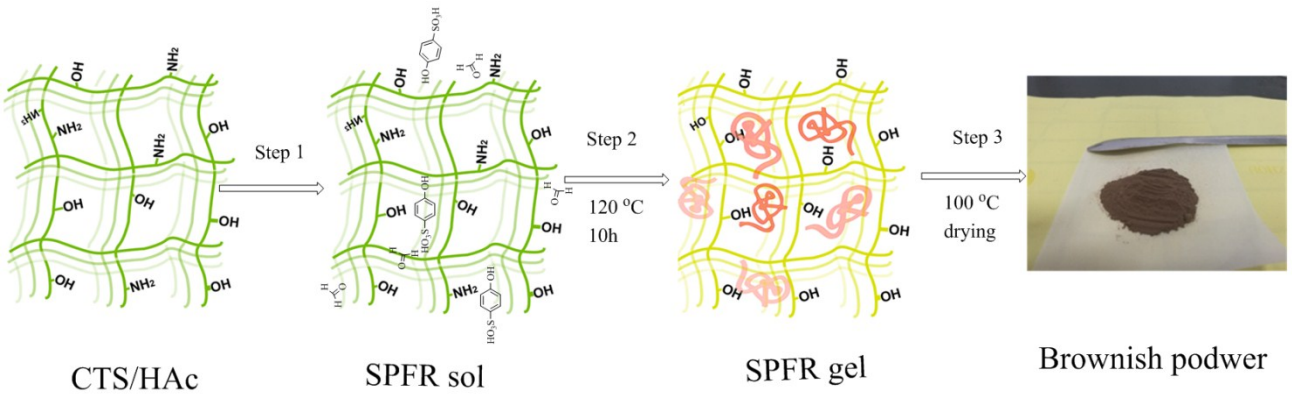

Scheme S1 Synthesis route of SPFR solid acids

Scheme S1 was obtained according to Yu's PFR gels synthesis route with a slight modification.

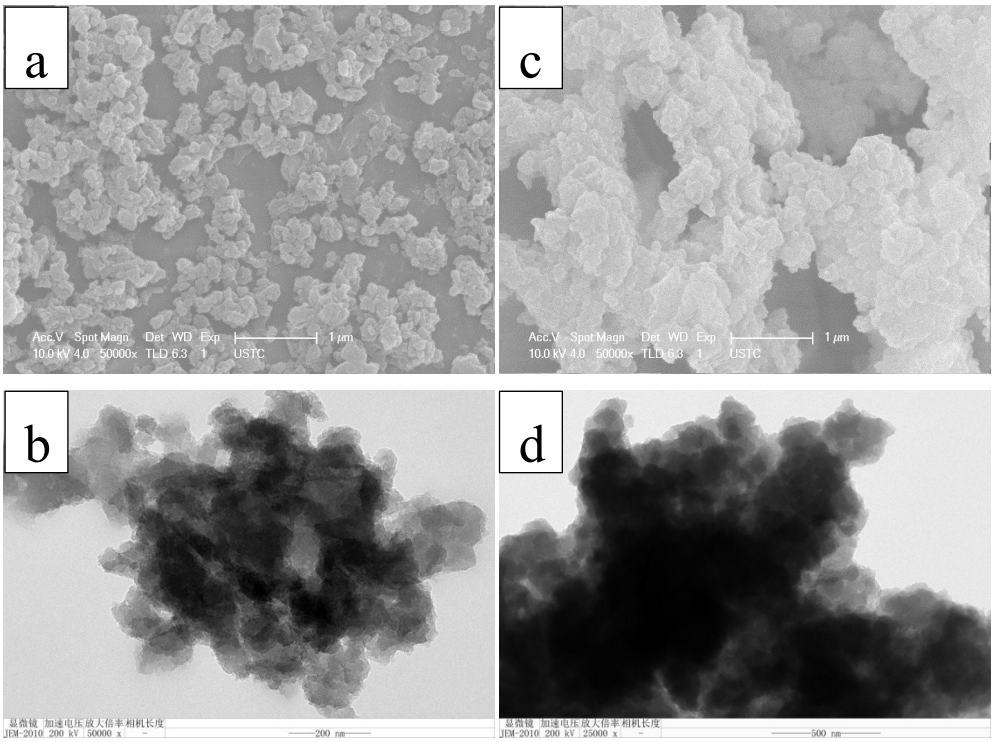

Fig.S1 SEM and TEM images of SPFR-0.26 (a, b) and SPFR-0.38 (c, d).

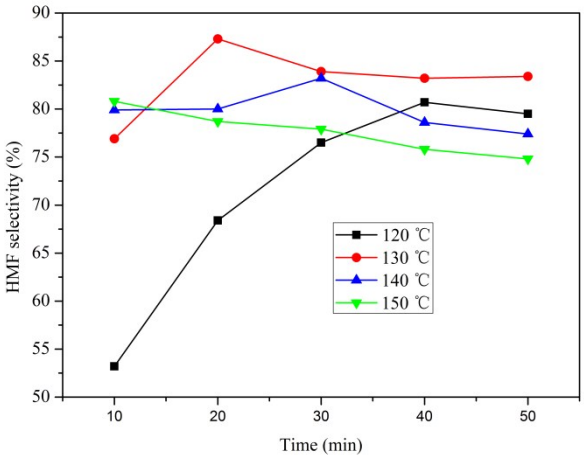

Fig.S2 HMF selectivity from fructose.

Table S1 Effect of water concentration on HMF production from glucose [a]

Entry	Water concentration (wt. %)	Temperature and time (°C/min)	HMF yield (%)	Furfural yield (%)
1	0	140/30	59.3	16.3
2	5	140/20	79.3	7.0
3	5	140/30	80.3	7.0
4	5	140/40	77.2	7.1
5	10	140/20	77.5	4.2
6	10	140/30	82.6	4.4
7	10	140/40	78.6	4.7
8	20	140/20	58.7	1.7
9	20	140/30	65.5	1.9
10	20	140/40	74.6	2.3
11	30	140/30	46.1	0.9

[a] Reaction conditions: 0.2 g SPFR-0.38, 0.40 g fructose, 15.0 ml GVL, different water concentration (based on GVL).