

## Supporting Information

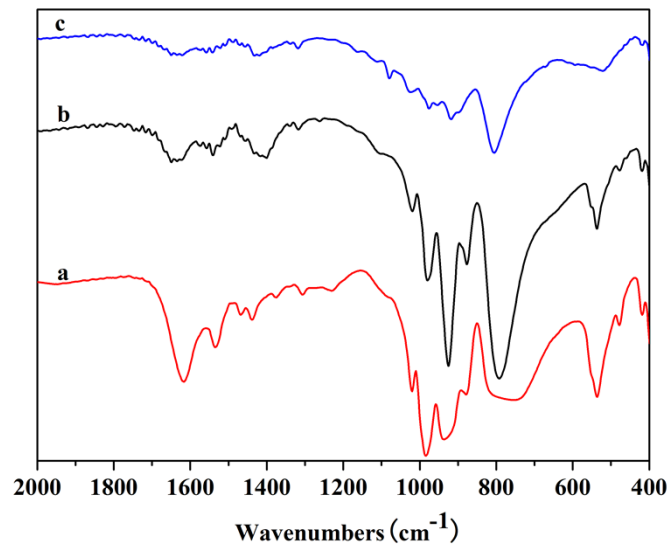
### Heteropoly acid ionic crystal containing Cr as active catalyst for dehydration of monosaccharides to produce 5-HMF in water

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**Fig. S1.** The IR spectra of the Cs<sub>2</sub>Cr<sub>3</sub>SiW<sub>12</sub> after adsorption of fructose (a); parent material (b); recycled Cs<sub>2</sub>Cr<sub>3</sub>SiW<sub>12</sub> (c).

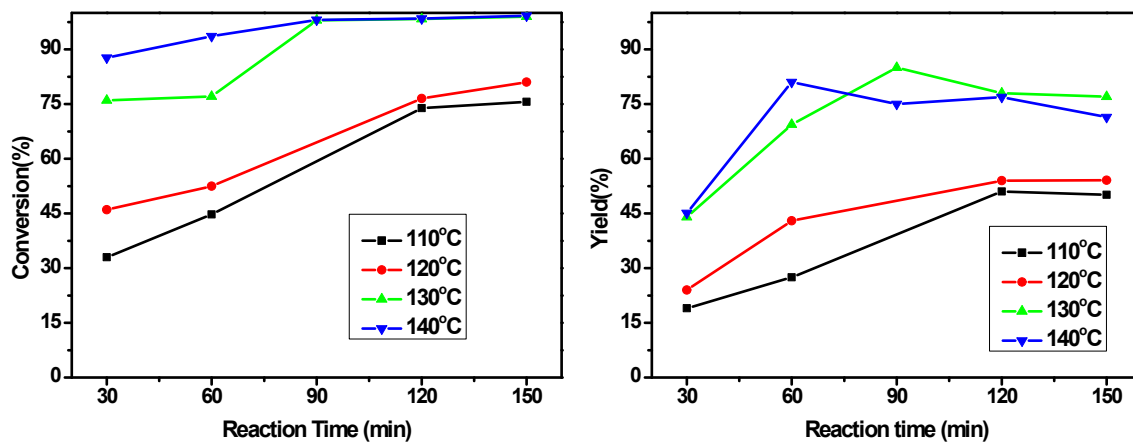


Fig. S2 The influence of temperature and reaction time on the conversion of fructose under the reaction conditions as: 0.3 g of fructose, 0.007 mmol of catalyst, 10 g of DMSO.