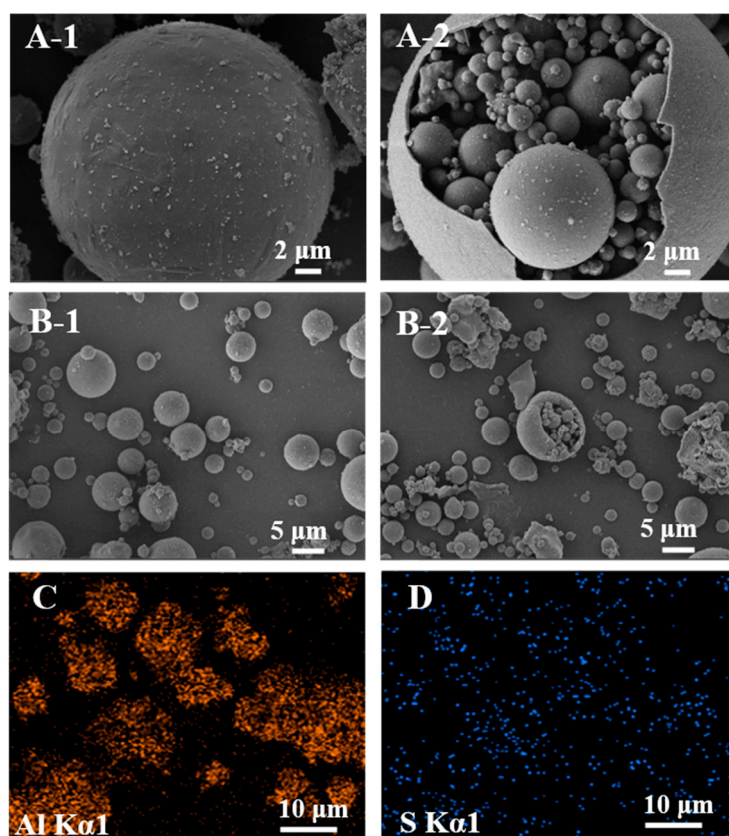
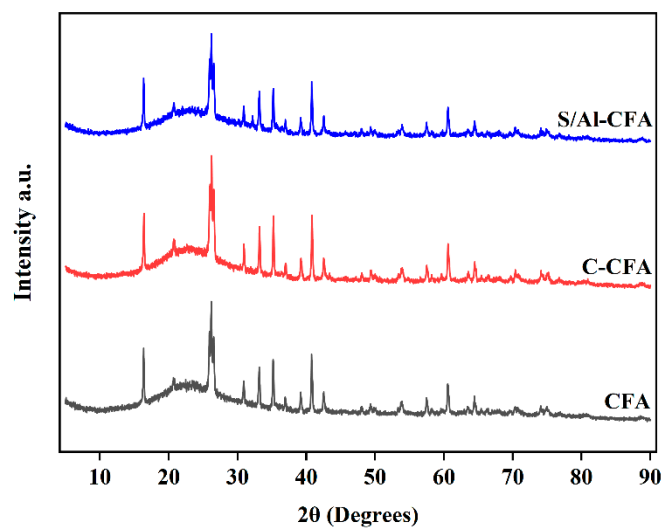


**Scheme S1.** Possible reaction pathways for furfural formation from xylose catalyzed by S-Al-CFA.

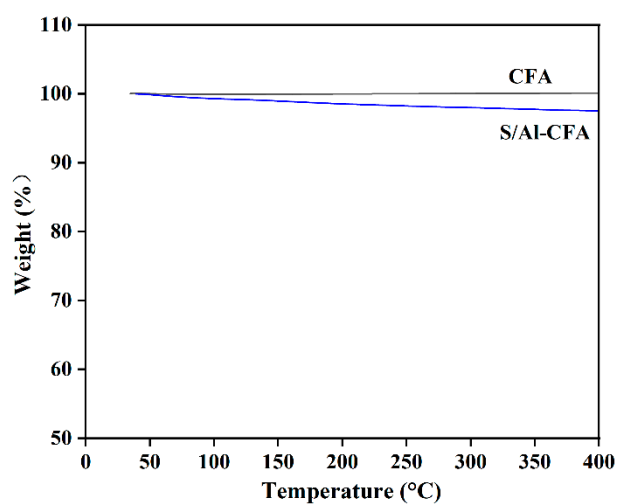


**Figure S1.** SEM images of the CFA (A-1 and B-1) and the S/Al-CFA (A-2 and B-2). Element maps of Al and S in the S/Al-CFA

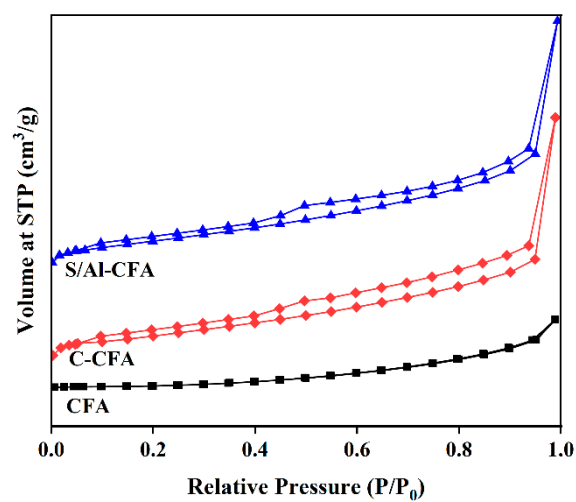
(C and D).



**Figure S2.** XRD patterns of the CFA, C-CFA, and S/Al-CFA.



**Figure S3.** TG results for the CFA and S/Al-CFA.



**Figure S4.** N<sub>2</sub> adsorption-desorption isotherms for CFA, C-CFA, and S/Al-CFA.

**Table S1.** The yield of furfural with different modified CFA catalysts.

	Fe-CFA	S/Fe-CFA	Cr-CFA	S/Cr-CFA	Al-CFA	S/Al-CFA
0 mM	38	59	38	59	38	59
5 mM	50	58	51	66	51	59
10 mM	51	60	56	62	61	64
15 mM	51	63	53	56	66	72
20 mM	45	58	51	56	62	64

**Table S2** Element compositions of the catalysts determined by EDS.

Elements	CFA (wt %)	C-CFA (wt %)	S/Al-CFA (wt %)
Si K	9.79	15.44	17.07
Al K	7.85	6.56	8.96
S K	0.14	0.23	1.35
C K	45.38	34.82	38.91

**Table S3.** Comparison of the catalyst performance before and after the cycle.

Catalyst	Weak acid mmol·g <sup>-1</sup>	moderate acid mmol·g <sup>-1</sup>	strong acid mmol·g <sup>-1</sup>	Total acid mmol·g <sup>-1</sup>
CFA	0.28	1.86	1.42	3.56
S/Al-CFA	2.99	14.73	6.18	23.90