processes

MDPI

Supplementary Materials

Phosphorus-Doped Carbon Supported Vanadium Phosphate Oxides for Catalytic Oxidation of 5-Hydroxymethylfurfural to 2,5-Diformylfuran

Sha Wen †, Kai Liu †, Yi Tian, Yanping Xiang, Xianxiang Liu * and Dulin Yin

National & Local Joint Engineering Laboratory for New Petro-chemical Materials and Fine Utilization of Resources, Key Laboratory of the Assembly and Application of Organic Functional Molecules of Hunan Province, College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha 410081, China; wensha@smail.hunnu.edu.cn (S.W.); nelab2012@126.com (K.L.); t15111298327@163.com (Y.T.); xiangyp@smail.hunnu.edu.cn (Y.X.); dulinyin@126.com (D.Y.)

* Correspondence: lxx@hunnu.edu.cn.

† Sha Wen and Kai Liu contributed equally to this work.

Table S1. The results of HMF oxidation over the different catalysts.

Entry	Catalysts	HMF Conversion (%)	Selectivity（%）		
			FDCA	DFF	FFCA
3	VPO/P-C	100	0	97.0	3.0
4	VPO	72.8	0	88.3	7.0
7	P-C	11.9	0	45.3	0

Reaction conditions: 0.2 mmol HMF, 10 mg catalyst, 2 mL DMSO, 10 h, 120 ℃, in the air.

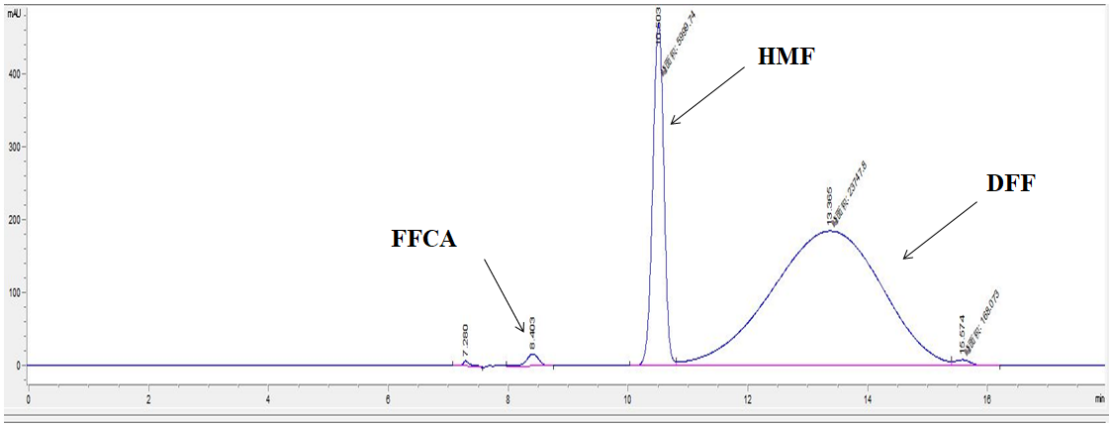

Figure S1. Liquid chromatography of HMF oxidation products.