Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2019

Preparation of two different crystal structures of cerous phosphate as solid acid catalysts: their different catalytic performance in aldol condensation reaction between furfural and acetone

Wenzhi Li^a, Mingxue Su^{a,*}, Tao Yang^a, Tingwei Zhang^a, Qiaozhi Ma^b, Song Li^c, Qifu Huang^d

- a. Laboratory of Basic Research in Biomass Conversion and Utilization,
 Department of Thermal Science and Energy Engineering, University of Science and
 Technology of China, Hefei 230026, China
 - College of Materials and Energy, South China Agricultural University,
 Guangzhou 510642, China
 - CAS Key Laboratory of Renewable Energy, Guangzhou Institute of Energy
 Conversion, Chinese Academy of Sciences, Guangzhou 510640, China
 - d. Beijing Mechanical Equipment Institute, Beijing, 100854, P.R. China

Identification of the presence of F_2Ac in the reaction mixture.

Reaction product F_2Ac , 1,5-bis-(2-furanyl)-1,4-pentadien-3-one, was identified in the reaction medium with a GC-MS by assignation of their fragmentation patterns, although they were not contained in the reference spectral library. Fig.S1 showed the corresponding mass spectrometry fragmentation patterns of this compounds, which was according with previous literature1. Its response factors were assumed to be similar of that of FAc.¹

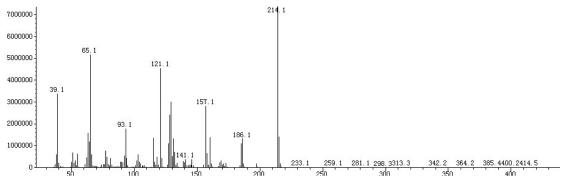


Fig.S1 MS fragmentation pattern of F2Ac.

Reference

1 I. Sádaba, M. Ojeda, R. Mariscal, R. Richards and M. L. Granados, Catal. Today, 2011, 167(1), 77-83.