Support Information for

"Design of highly ordered mesoporous $H_3PW_{12}O_{40}/ZrO_2$–Si(Ph)Si hybrid catalyst for methyl levulinate synthesis"

Fig. S1 (a) wide-angle XRD patterns of $H_3PW_{12}O_{40}/ZrO_2$–Si(Ph)Si and pure $H_3PW_{12}O_{40}$, and (b) Low-angle XRD patterns of $H_3PW_{12}O_{40}/ZrO_2$–Si(Ph)Si and $H_3PW_{12}O_{40}/ZrO_2$.

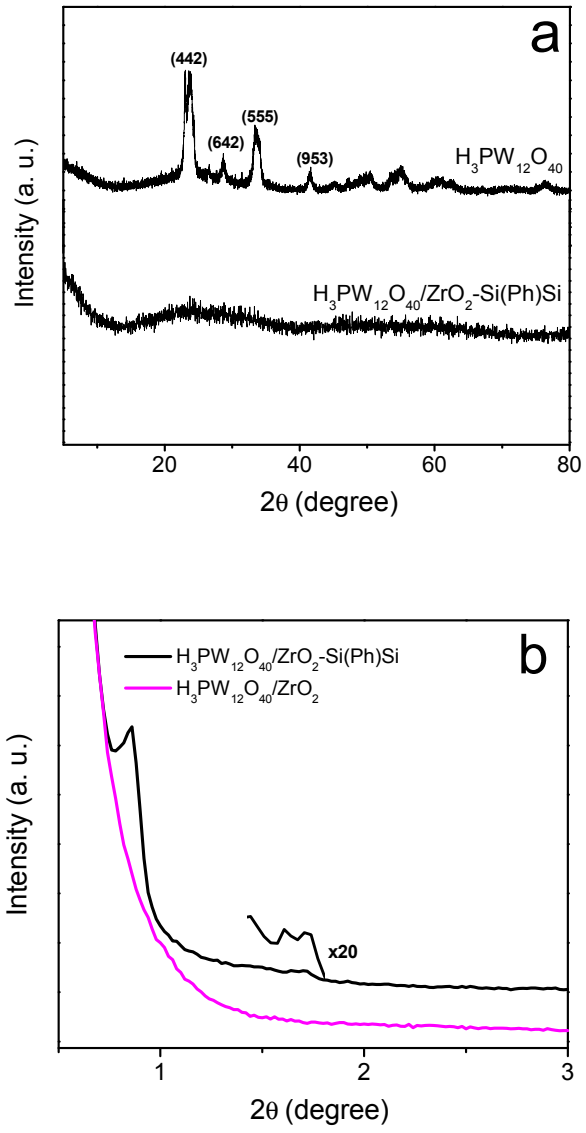

Fig. S2 Nitrogen gas adsorption-desorption isotherms and pore size distribution (insert) profile of $H_3PW_{12}O_{40}/ZrO_2$.

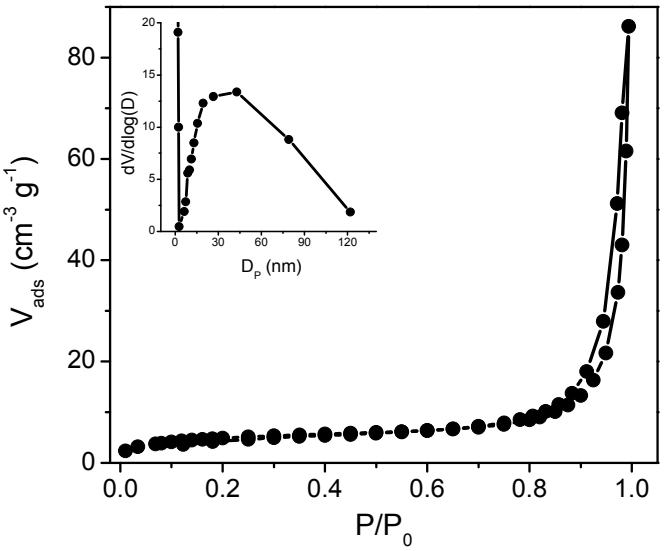

Fig. S3 Influence of the catalyst amount on the yield of methyl levulinate. LA: MeOH = 1: 7; 3 h; 65 ^{o}C; atmosphere refluxing.

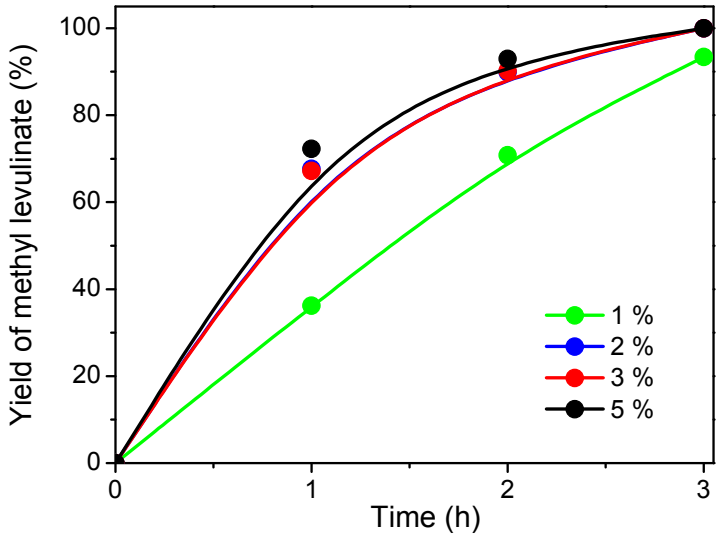

Fig. S4 Influence of the stirring speed on the yield of methyl levulinate. LA: MeOH = 1: 7; $H_3PW_{12}O_{40}/ZrO_2$–Si(Ph)Si (2 wt%); 3 h; 65 ^oC; atmosphere refluxing.