Fig. 1 (a) SEM image of the as-synthesized ZrP-h sample; (b) SEM image of the calcined ZrP-hc650 sample; (c) cross-sectional TEM image of the ZrP-h sample. The hollow macrochannels are practically parallel to each other, and extend throughout almost the whole particles.

Fig. 2 SEM image of the ZrPO sample synthesized without autoclaving.

Fig. 3 N\textsubscript{2} adsorption-desorption isotherms and the corresponding BJH pore size distribution curves (Inset) of the ZrPO samples synthesized without autoclaving.