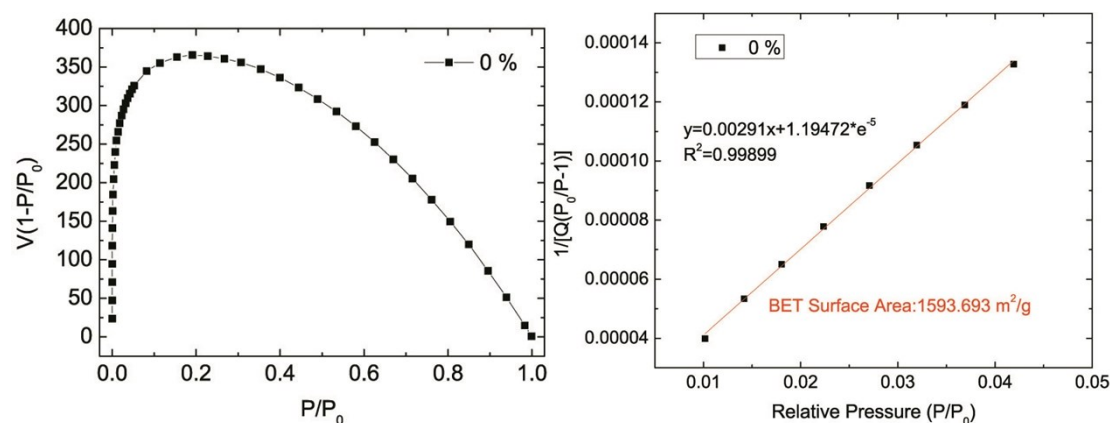


Supplementary Information

Role of ultramicropore on the remarkable gas storage in hypercrosslinked polystyrene networks studied by positron annihilation

YiLin Li,^a JunJie Liu,^a JingJing Kong,^a Ning Qi,^{*a} and ZhiQuan Chen ^{*a1},
School of Physics and Technology, Hubei Key Laboratory of Nuclear Solid State
Physics, Wuhan University, Wuhan 430072, China

In order to better show the calculation process of the specific surface area and pore size in BET, we presented the Rouquerol and BET Plots of HCLPS as shown in Fig.S1. The calculated results of pore structures for the synthesized HCLPS are summarized in Table 1 in the manuscript. As the materials are highly microporous in nature, it is more accurate to select the valid relative pressure (P/P_0) region from 0.005 to 0.05 when using Rouquerol transformation method to calculate the specific surface area.



¹ Corresponding author. Email: ningqi@whu.edu.cn(N. Qi), chenzq@whu.edu.cn (Z.Q. Chen)

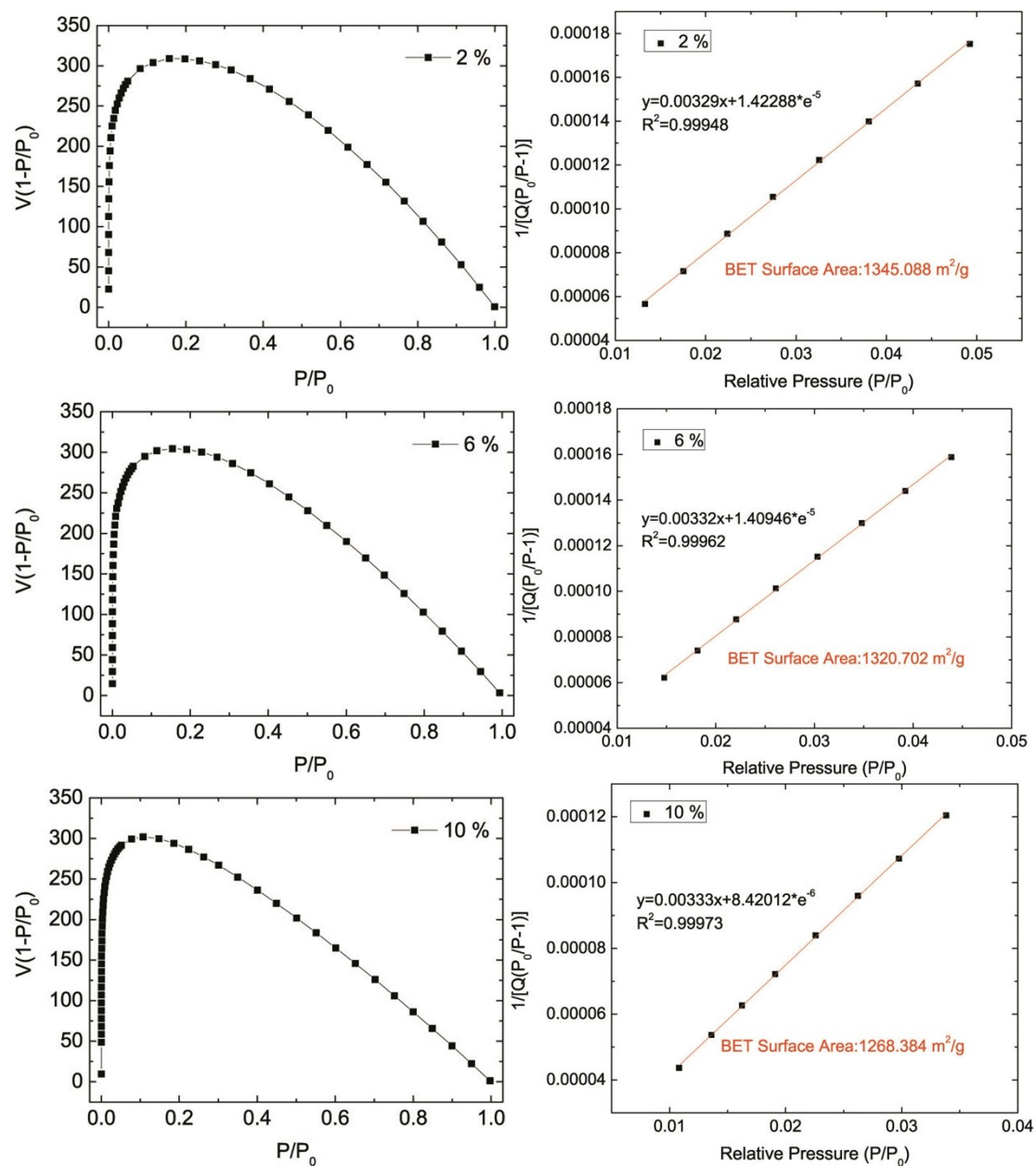


Fig. S1 Rouquerol plots and BET linear plots of HCLPS. The valid relative pressure (P/P_0) region for BET specific surface area of HCLPS was determined to be 0.005 – 0.05 P/P_0 , where the term $1/[Q(P/P_0-1)]$ continuously increases with increasing P/P_0 .