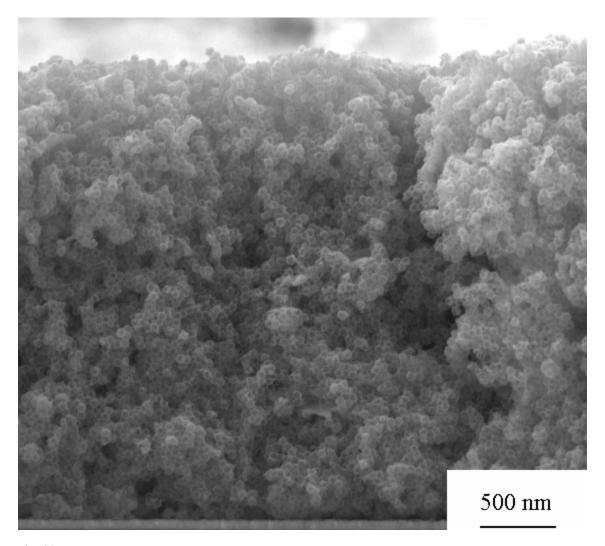
## **Supporting information**

## Synthesis, Characterization, and High Temperature CO<sub>2</sub> capture of New CaO based Hollow Sphere Sorbents

Fa-Qian Liu,\* Wei-Hua Li\*, Bao-Cheng Liu, and Rong-Xun Li



 $Fig.\ S1\ SEM$  image of cross-section of hollow spheres stacked on the silicon substrate prepared from T1 core-shell hydrogel template.

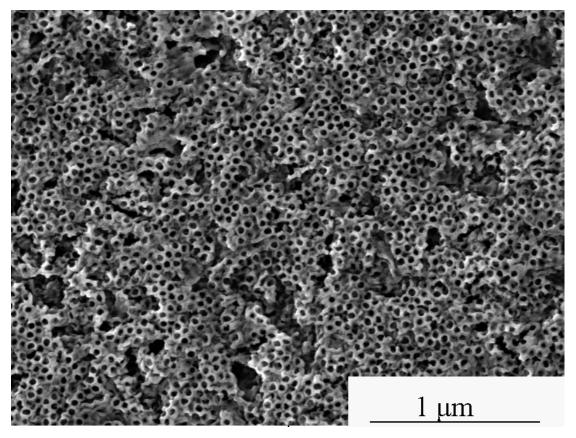


Fig. S2 porous CaO prepared from sulfonated PS spheres and CaCl<sub>2</sub>·2H<sub>2</sub>O without the presence of Al(O-i-Pr)<sub>3</sub>

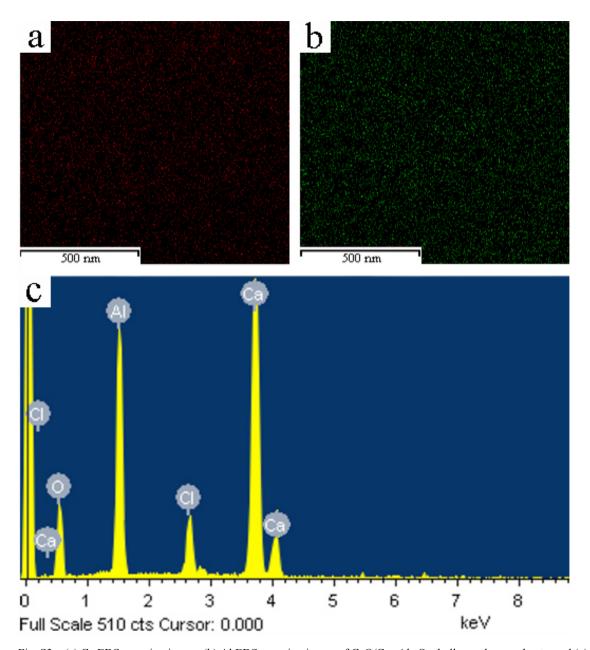


Fig. S3 (a) Ca EDS mapping image, (b) Al EDS mapping image of CaO/Ca<sub>12</sub>Al<sub>14</sub>O<sub>33</sub> hollow sphere sorbents, and (c) their corresponding EDS profile.