Supporting Information

Facile Preparation of Bridged Silsesquioxane Microspheres with Interconnected Multi-Cavities and Open Holes

Zhen Wang, Zhenchao Qian, Yuan Cao, Xiangzhi Zhang, Renzhong Tai, Haixia Dong, Ning Zhao* and Jian Xu*

a Beijing National Laboratory for Molecular Sciences, Laboratory of Polymer Physics and Chemistry, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

b University of Chinese Academy of Sciences, Beijing, 100049, China

c Shanghai Synchrotron Radiation Facility, Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Shanghai 201204, China

*Corresponding author: Prof. Ning Zhao; Prof. Jian Xu

E-mail address: zhaoning@iccas.ac.cn; jxu@iccas.ac.cn

Tel.(Fax.): +86 10 82619667

Postal address: Box 50, Zhongguancun North First Street 2, Beijing, 100190, China.
Figure S1. Isotherm of nitrogen sorption analysis of the BSQ microspheres.
Figure S2. Photo presenting the solubility differences of lissamine rhodamine B sulfonyl chloride in water and the BSQ precursor.
Figure S3. SEM micrographs of BSQ materials prepared in the solution with an isopropanol/water/ammonia aqueous solution ratio of (a) 0/9/18, (b) 1.4/7.6/18 and (c) 4/5/18. The scale bars are 10 μm.
Figure S4. (a) SEM image and (b) particle size distribution of BSQ microspheres prepared from the precursor which was premixed with water. The particle size distribution was obtained by measuring the sizes of 100 BSQ microspheres in SEM images.