

## Supporting Information

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

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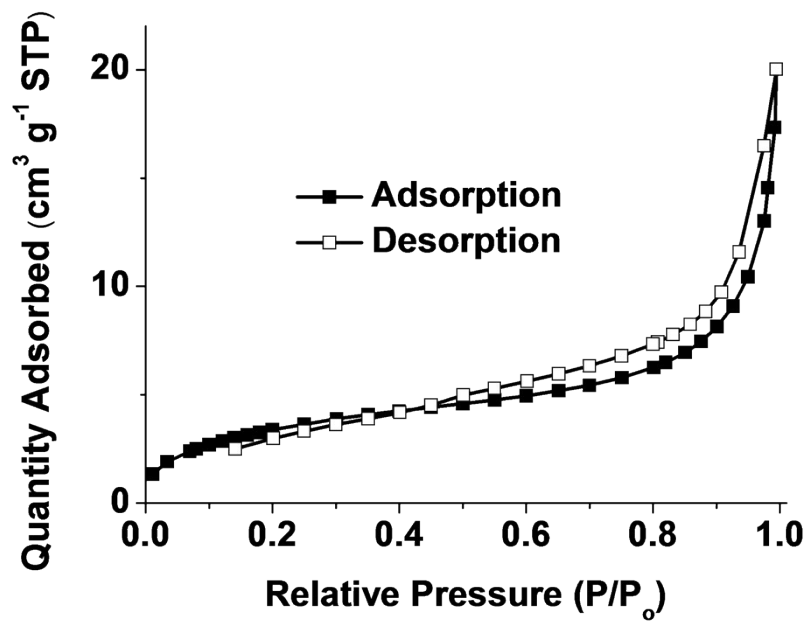


Figure S1. Isotherm of nitrogen sorption analysis of the BSQ microspheres.

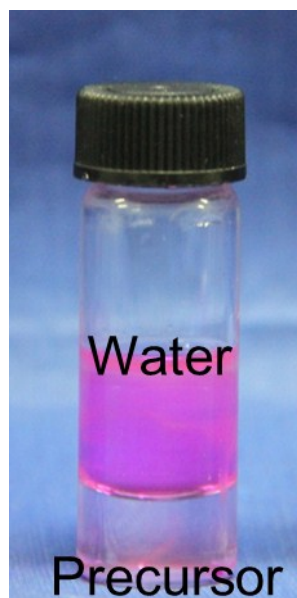


Figure S2. Photo presenting the solubility differences of lissamine rhodamine B sulfonyl chloride in water and the BSQ precursor.

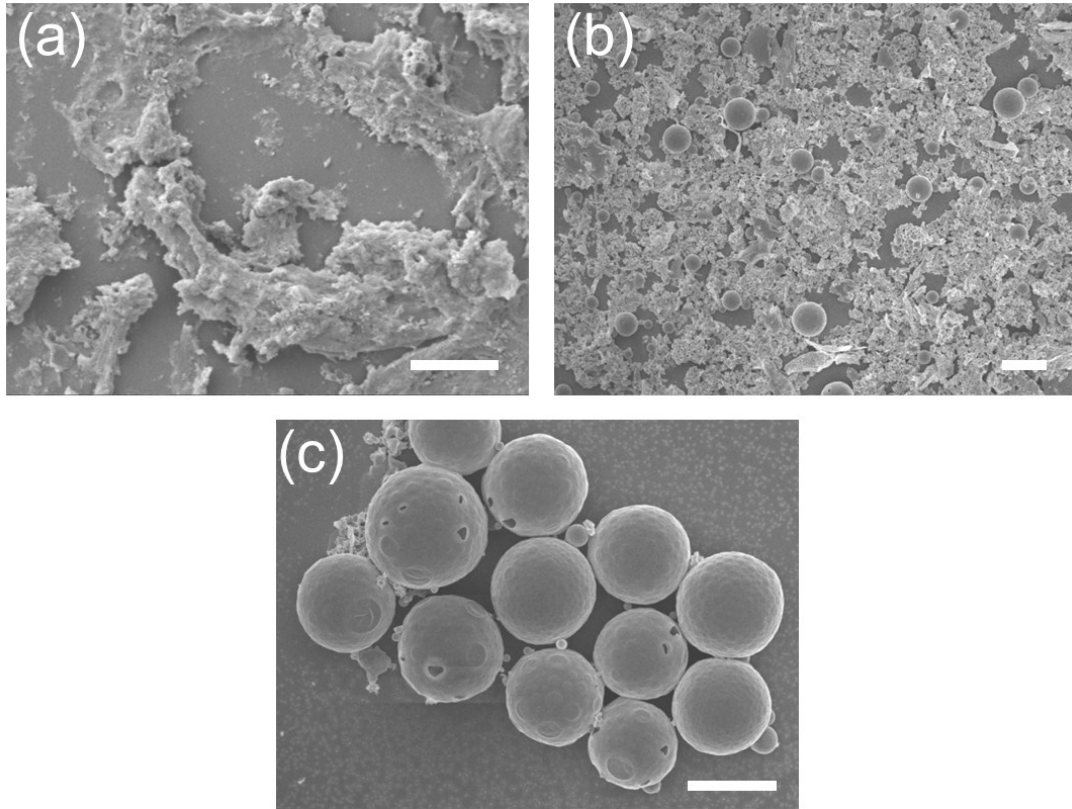


Figure S3. SEM micrographs of BSQ materials prepared in the solution with an isopropanol/water/ammonia aqueous solution ratio of (a) 0/9/18, (b) 1.4/7.6/18 and (c) 4/5/18. The scale bars are 10  $\mu\text{m}$ .

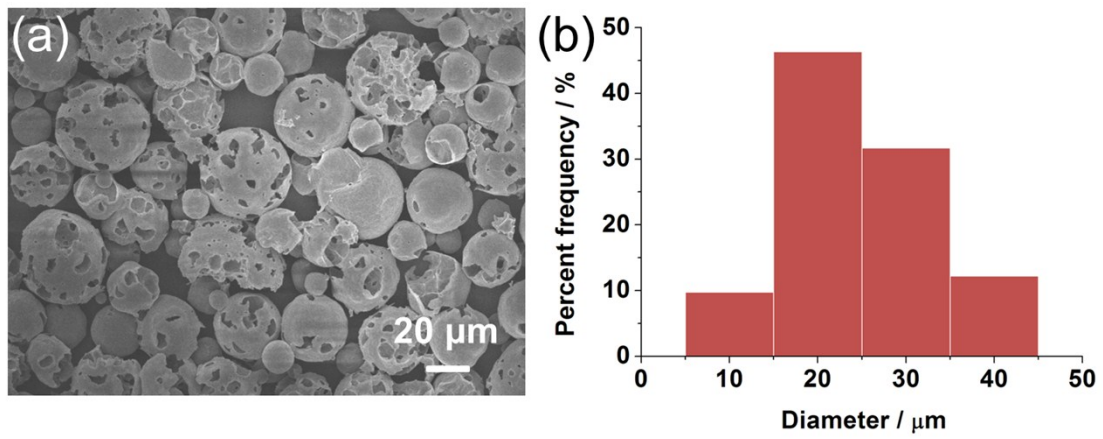


Figure S4. (a) SEM image and (b) particle size distribution of BSQ microspheres prepared from the precursor which was premixed with water. The particle size distribution was obtained by measuring the sizes of 100 BSQ microspheres in SEM images.