

Electronic supplementary information for:

Self-Assembly of Block Copolymer into Sieve-Like Particles with Arrayed Switchable Channels and as Scaffolds to Guide the Arrangement of Gold Nanoparticles

Yun He^{ab}, Yan Zhang^a, Nan Yan^{*a}, Yutian Zhu^{*a}, Wei Jiang^a, Dean Shi^{*b}

^aState Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China

^bMinistry-of-Education Key Laboratory for the Green Preparation and Application of Functional Materials, Hubei Collaborative Innovation Center for Advanced Organic Chemical Materials, Faculty of Materials Science and Engineering, Hubei University, Wuhan 430062, China.

*E-mail: nyan@ciac.ac.cn.

*E-mail: ytzhu@ciac.ac.cn.

*E-mail: deanshi2012@yahoo.com.

SUPPORTING FIGURES:

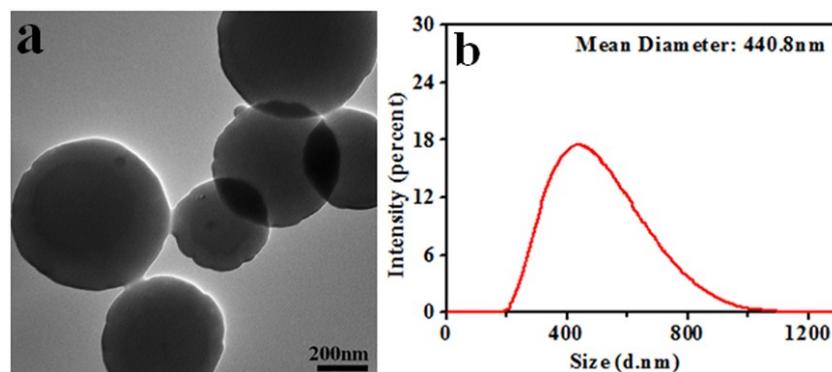


Figure S1. (a) TEM image of P4VP_{4.5k}-*b*-PS_{38k}-*b*-P4VP_{4.5k} particles without I₂ vapor staining; (b) Dynamic light scattering results for the BCP particle size distribution.

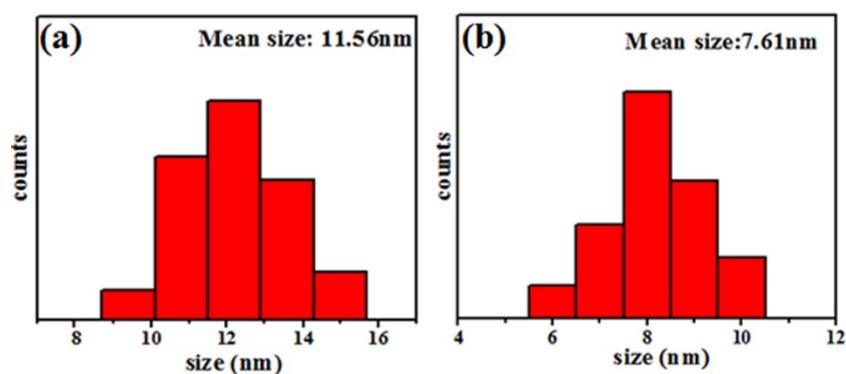


Figure S2. (a) Size distribution of the P4VP cylinders of the table-like particles; (b) Pore size distribution of the P4VP channels of the SL particles.

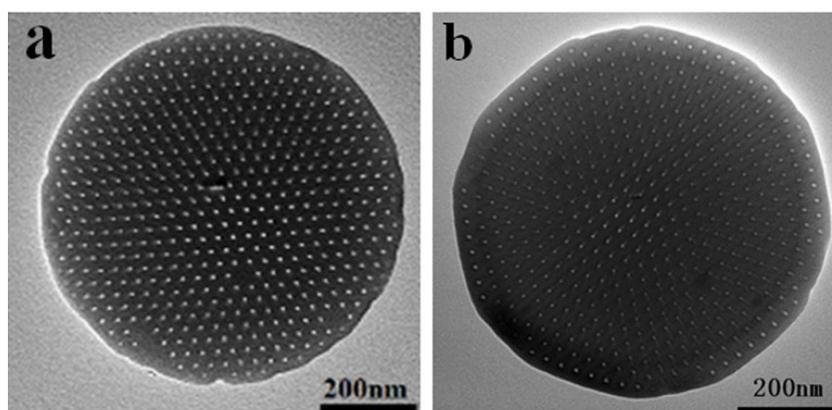


Figure S3. Amplified TEM images of one representative SL particle with (a) and without (b) I₂ vapor staining, respectively.

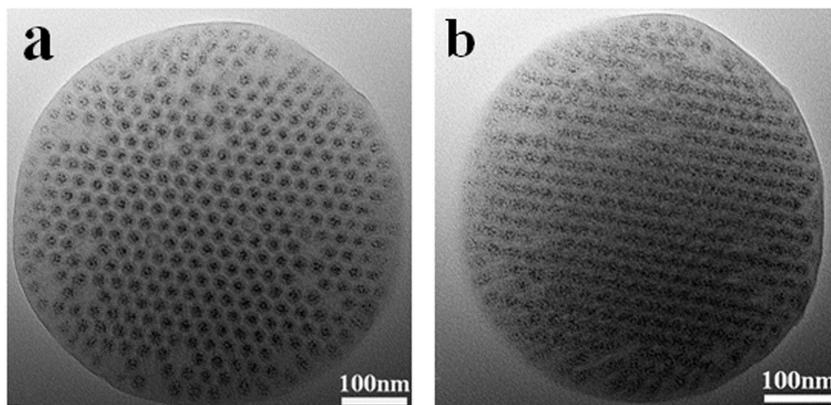


Figure S4. TEM images of SL hybrid particles tilted at angles of (a) 0° and (b) 27°.

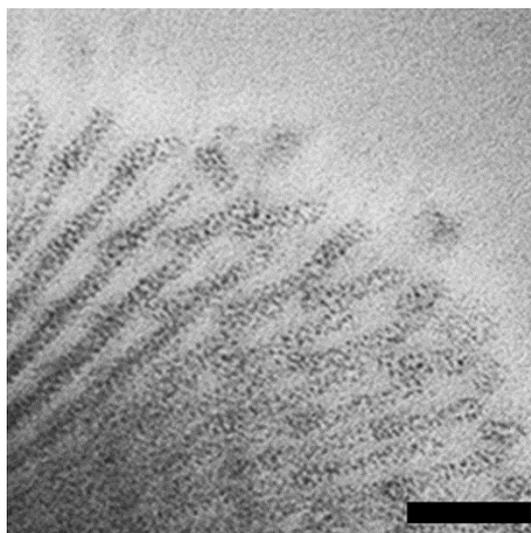


Figure S5. Amplified TEM image of the *SL* inorganic/organic hybrid particle after toluene annealing. The scale bar represents 100 nm.