

Supporting Information

C₁₂mimBr Ionic liquid/SDS vesicle formation and use as template for the synthesis of hollow silica spheres

Jie Yuan, Xiangtao Bai, Mingwei Zhao, Liqiang Zheng*

*Key Laboratory of Colloid and Interface Chemistry, Shandong University, Ministry of
Education, Jinan, Shandong, 250100, People's Republic of China*

E-mail: lqzheng@sdu.edu.cn Phone: +86-531-88366062 Fax: +86-531-88564750

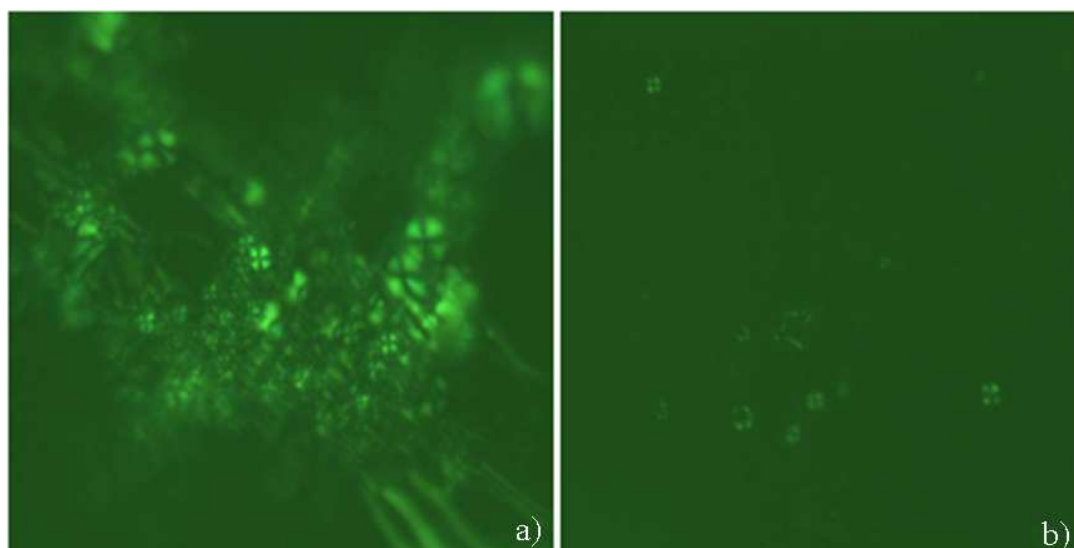


Figure S1. Typical polarized images of the samples from the L_α phase:
(a) 100 mM $C_{12}mimBr$ and $r = 0.6$; (b) 100 mM $C_{12}mimBr$ and $r = 0.63$ at $25.0 (\pm 0.1) ^\circ C$.

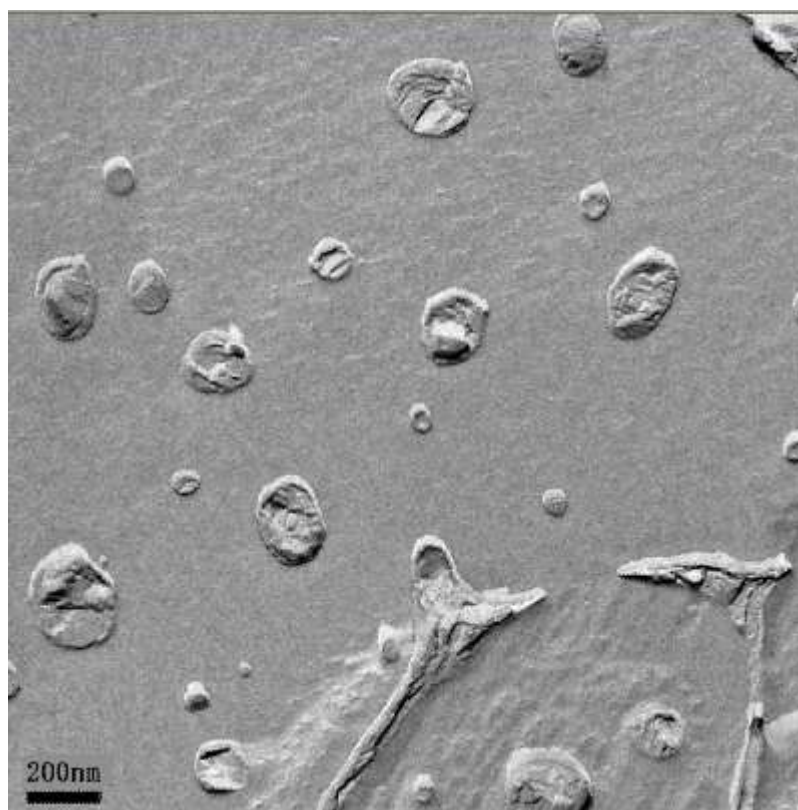


Figure S2. FF-TEM images of 100 mM $C_{12}mimBr$ and $r = 0.63$ birefringent samples from the L_α phase.

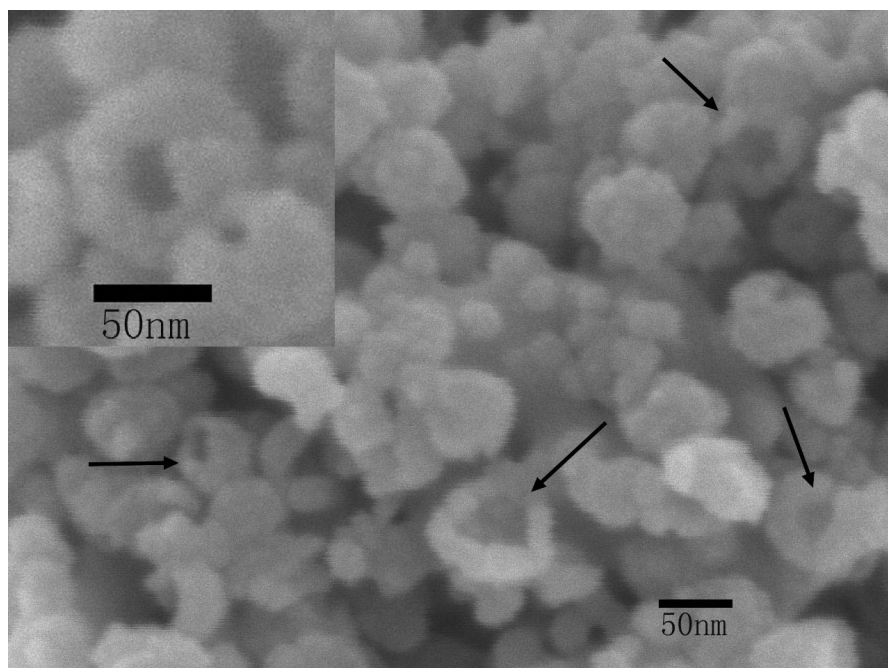


Figure S3. SEM images of calcined hollow silica spheres prepared at $25.0 (\pm 0.1) ^\circ\text{C}$. The black arrows indicate examples of broken spheres. Inset: An individual sphere with hollow interior.