Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2015

## Supporting information

for

Preparation of porous silica films in a binary template system for doublelayer broadband antireflective coatings

Yuanyang Li<sup>†</sup>, Haibing Lv<sup>‡</sup>, Longqiang Ye<sup>†</sup>, Lianghong Yan<sup>‡</sup>, Yulu Zhang<sup>†</sup>, BiBo Xia<sup>†</sup>, Hongwei Yan<sup>\*</sup>, and Bo Jiang<sup>\*</sup>.

†Key Laboratory of Green Chemistry & Technology, College of Chemistry, Sichuan University, Chengdu, 610064, China. E-mail: <a href="mailto:jiangbo@scu.edu.cn">jiangbo@scu.edu.cn</a>

‡Research Center of Laser Fusion, China Academy of Engineering Physics, Mianyang 621900, China. E-mail: <a href="https://hwyan@163.com">hwyan@163.com</a>

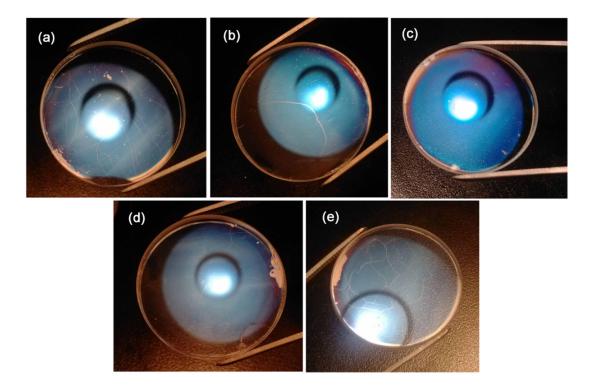


Figure S1. The digital images of the single-layer coatings made by sols with the molar ratio of two templates CTAB/PPG ranged from 0.6-1.2. (a) CTAB/PPG=0.6, (b)CTAB/PPG=0.8 (c)CTAB/PPG=1.0, (d)CTAB/PPG=1.2, (e)CTAB/PPG=1.4.

A uniform and crack-free coating was obtained when the molar ratio of CTAB/PPG is 1.0. The more the ratio deviate from 1.0, the more crack appeared on the surface.