## **Electronic Supplementary Information**

## Template Synthesis of NiO Ultrathin Nanosheets Using Polystyrene Nanospheres and Their Electrochromic Properties

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Fig. S1. XRD patterns of  $Ni_2CO_3(OH)_2$  and PS NSs.



Fig. S2. TG curves of PS NSs@Ni<sub>2</sub>CO<sub>3</sub>(OH)<sub>2</sub> composite and Ni<sub>2</sub>CO<sub>3</sub>(OH)<sub>2</sub>.



Fig. S3. FESEM images of two representative samples: (a) without PS templates, (b) with 2.4 g of urea.

From Fig. S3a, it can be clearly seen only irregular spherical particles were obtained without PS templates. We studied the effect of urea concentration on the morphology while keeping other conditions unchanged. Fig. S3b shows that nanosheets grew into flock state on the surface of template, because less negative active groups were on the surface of PS templates.