

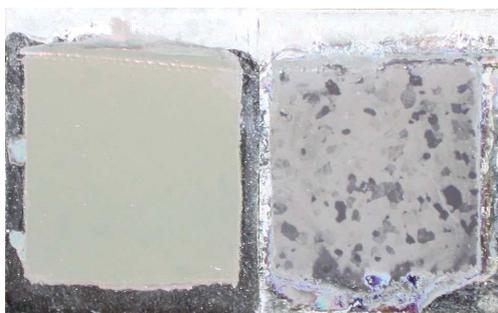
## Supporting Information

### Self-ordered Anodic Alumina with Continuously Tunable Pore Intervals from 410 to 530 nm

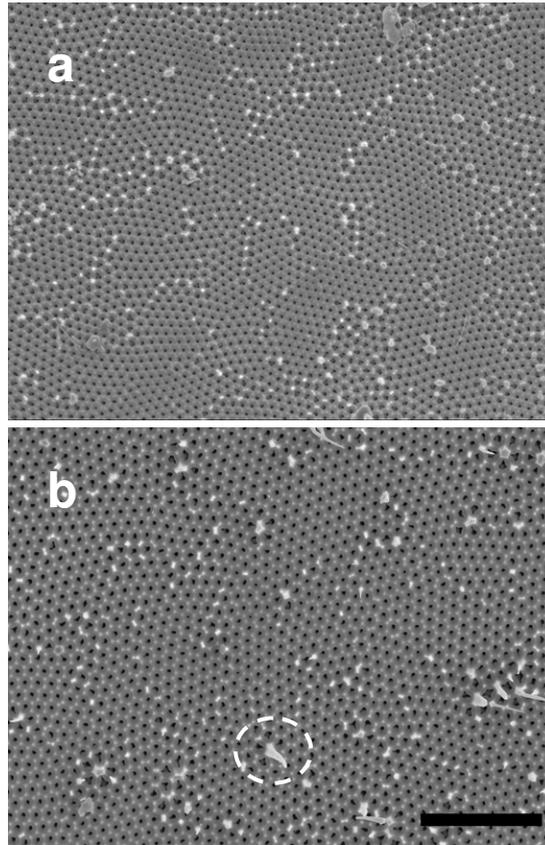
*Chuanmin Sun,<sup>†,‡</sup> Jia Luo,<sup>†,‡</sup> Longmin Wu<sup>†,\*</sup> and Junyan Zhang<sup>‡,\*</sup>*

<sup>†</sup> State Key Laboratory of Applied Organic Chemistry, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou 730000, China.

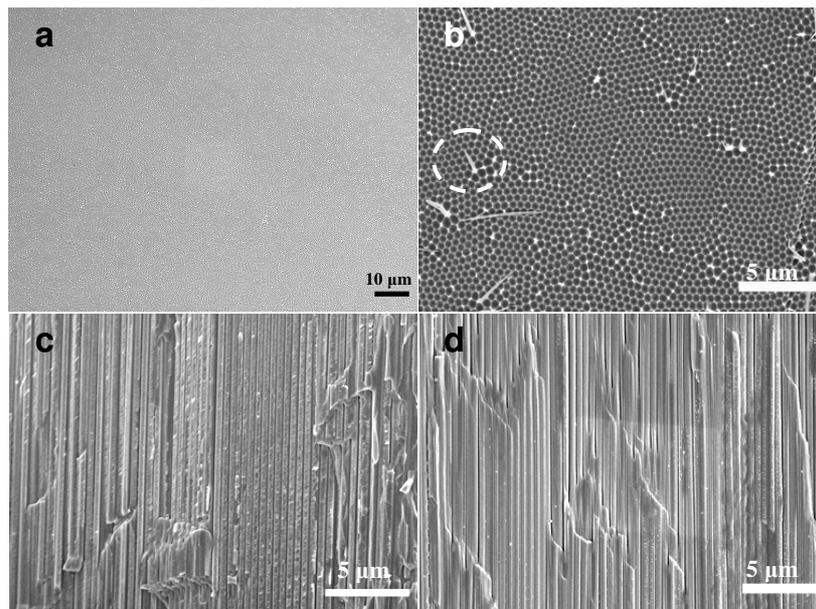
<sup>‡</sup> State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China.



**Figure S1** Photographs of the samples anodized at 205 V (left) and 210 V (right) at the temperature of 5 °C in the mixed electrolyte of 1.0% phosphoric acid and 0.01 M Alox.

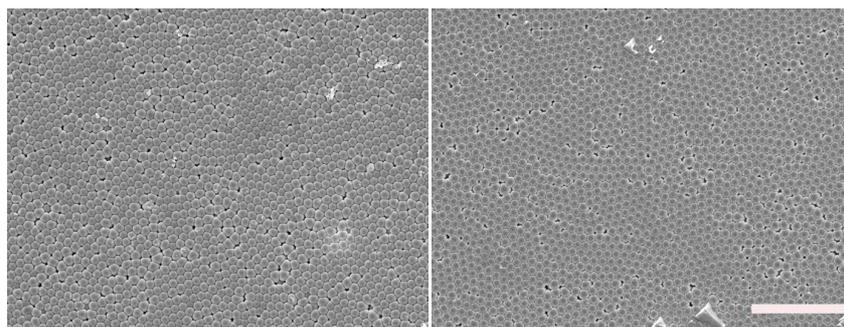


**Figure S2** SEM micrographs of PAA films after performing two-step anodization with the first-step anodization for 6 h at the anodization voltage of (a):180 V and (b): 230 V (scale bar = 5  $\mu\text{m}$ ).



**Figure S3** a. SEM micrographs after performing two-step anodization with the

first-step anodization for 6 h at 205 V and 5 °C. **b.** Aluminum specimen of FE-SEM micrograph after removal of the porous alumina layer of the first-step anodization fabricated at 205 V and 15 °C. **c** and **d** is the cross-sectional FE-SEM micrographs anodized at 5 and 15 °C respectively at the voltage of 205 V.



**Figure S4** SEM micrographs of bottom surfaces of PAA films formed at the anodization voltage of left: 200 V and right: 205V with the same duration and temperature (scale bar = 5  $\mu\text{m}$ ). The micrograph at 200 V have more small hollows than that at 205 V, and these hollows correspond to the projections (aluminum) at the boundaries of self-organized domains shown in Fig. S2 and Fig. S3b, which illuminates that more higher repulsion force of the PAA cells should be produced at higher voltage.