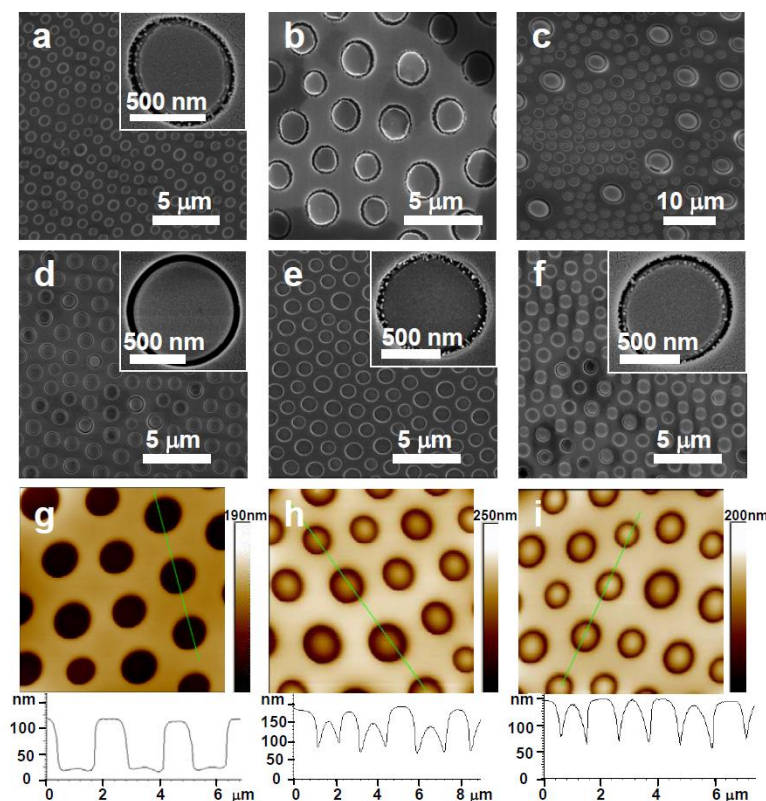
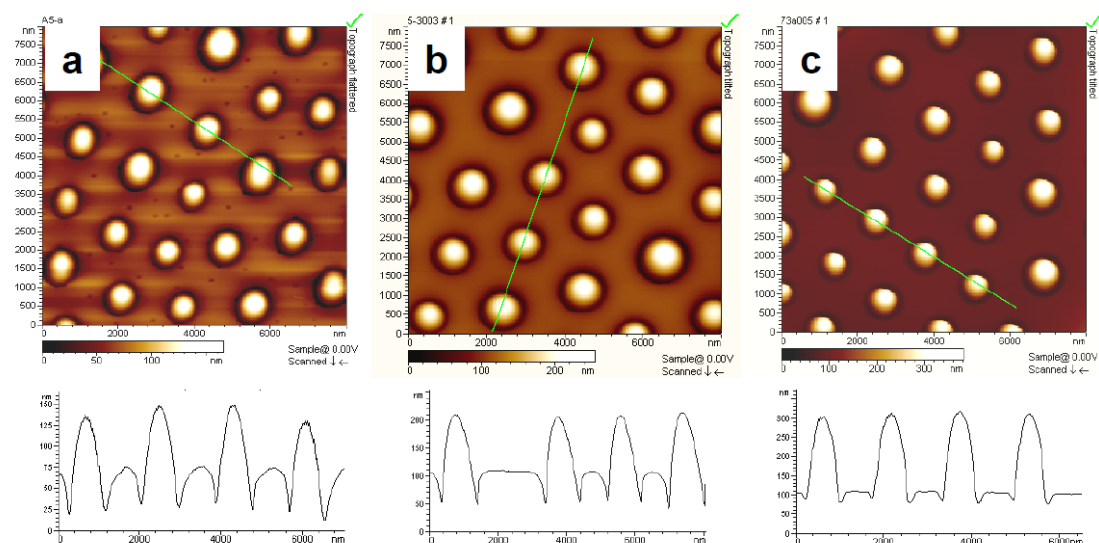


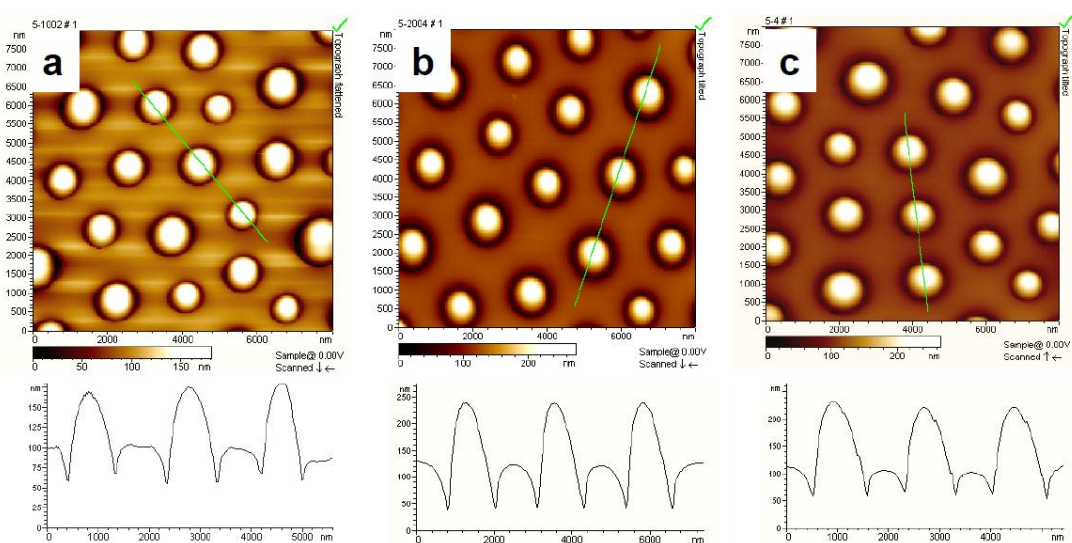
## Supplementary Information



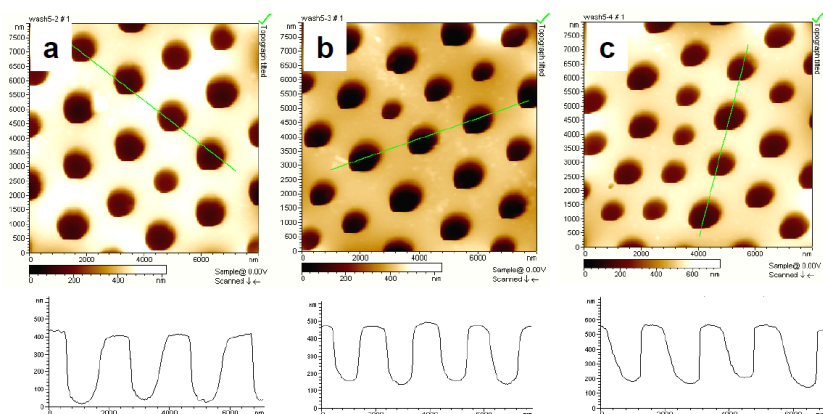
**Fig. S1** SEM (a-f) and ( $8 \times 8 \mu\text{m}^2$ ) AFM (g-i) images of the as-prepared hierarchical honeycomb patterns from different experimental conditions: 1) the effect of  $Rw$ : 1:16 (a); 1:4 (b); 1:1 (c); 2) the effect of RH: 20 % (d, g); 3) the effect of ambient temperature: 8 °C (e, h); 24 °C (f, i), respectively. The insets in (a) and (d-e) show the corresponding higher magnification. The corresponding AFM cross-section height profile is shown in (g-f), respectively.



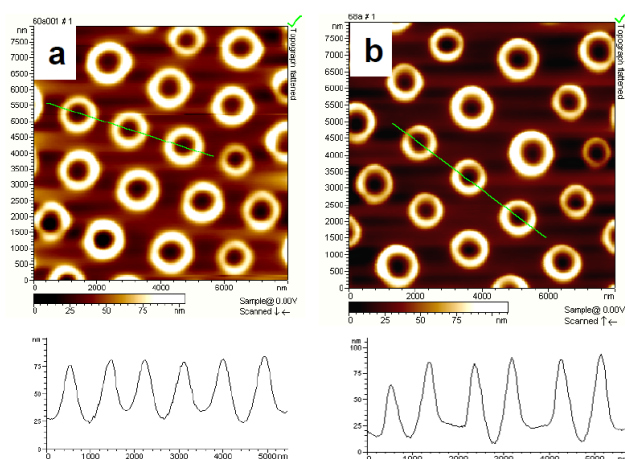
**Fig. S2** ( $8 \times 8 \mu\text{m}^2$ ) AFM height images (top) and their cross-section height profiles (bottom) of the as-prepared hierarchical honeycomb patterns after heating for 3 h at: 90 °C (a); 120 °C (b); 150 °C (c), respectively.



**Fig. S3** ( $8 \times 8 \mu\text{m}^2$ ) AFM height images (top) and their cross-section height profiles (bottom) of the as-prepared hierarchical honeycomb patterns after heating at 120 °C for: 0.5 h (a); 1 h (b); 6 h (c), respectively.



**Fig. S4** ( $8 \times 8 \mu\text{m}^2$ ) AFM height images (top) and their cross-section height profiles (bottom) of the as-prepared hierarchical honeycomb patterns after heating at  $120^\circ\text{C}$  for different times followed with water washing: 1 h (a); 3 h (b); 6 h (c), respectively.



**Fig. S5** ( $8 \times 8 \mu\text{m}^2$ ) AFM height images (top) and their cross-section height profiles (bottom) of the as-prepared PDMS replicas templated by the hierarchical honeycomb patterns after curing for 6 h at:  $60^\circ\text{C}$  (a);  $90^\circ\text{C}$  (b), respectively.