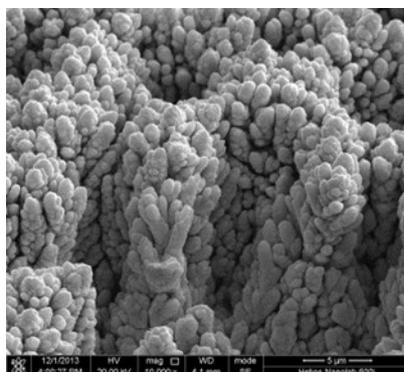
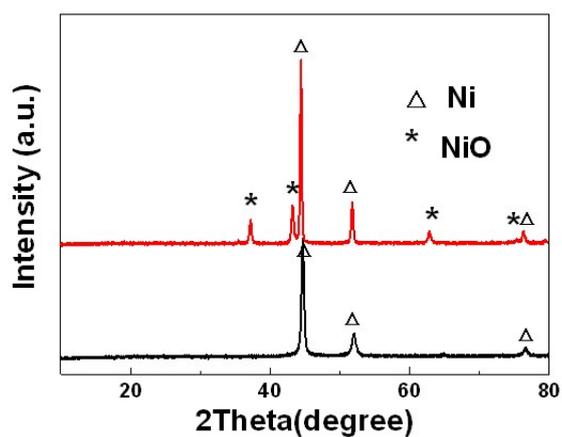


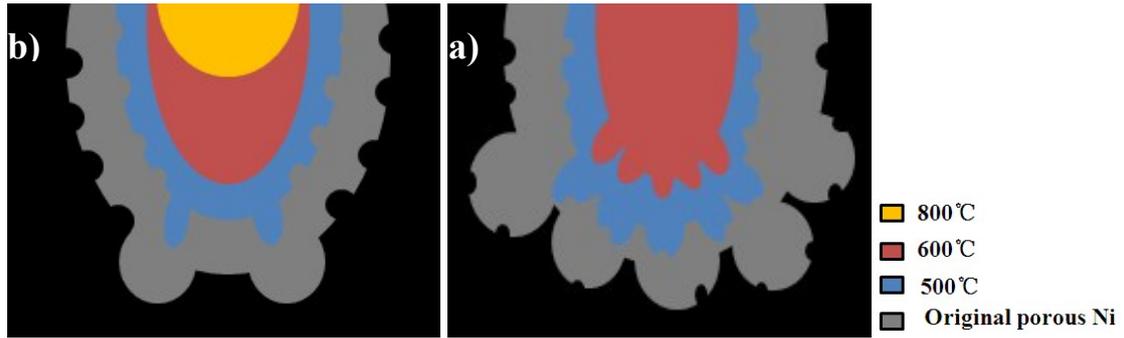
## Supporting Information



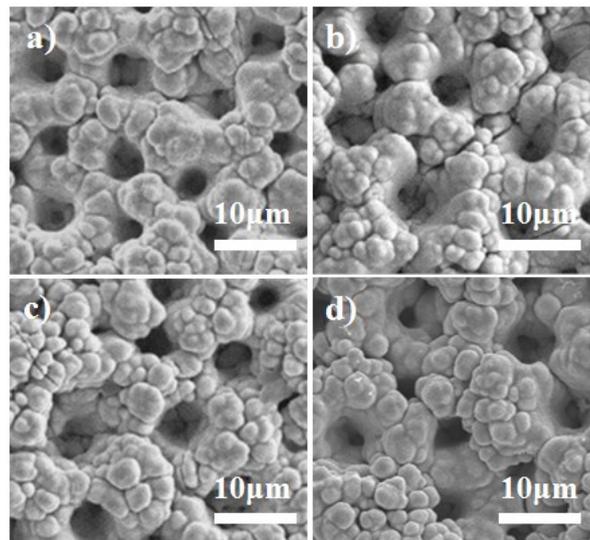
**Figure S1.** The cross sectional SEM image of Ni film chemical electrodeposited without post annealing.



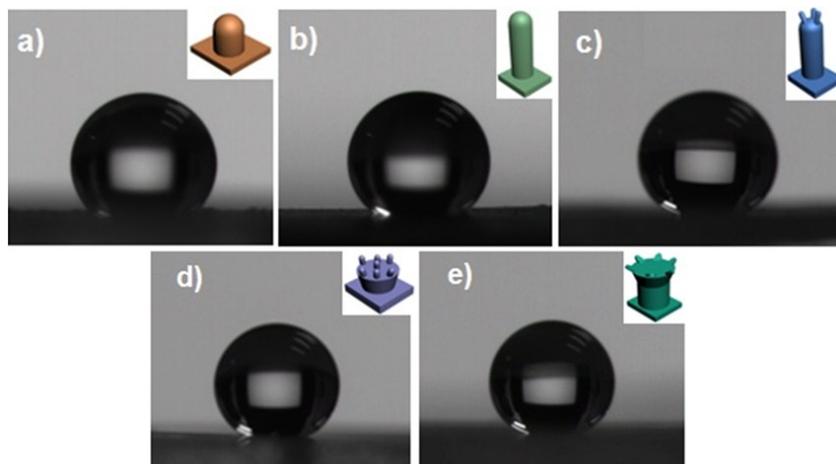
**Figure S2.** XRD patterns of p-Ni/NiO template annealed at 600 °C for 5 h and Ni before annealing.



**Figure S3.** Schematic of change on microstructure of p-Ni/NiO templates annealed at 500°C, 600 °C, 800 °C for 5 h and Ni before annealing (a) without OP addition and (b) OP (0.01%) addition in the bath.



**Figure S4.** SEM images of p-Ni/NiO templates after a) 1, b) 5, c) 10, and d) 20 cycles of microarrays fabrication and demolding.



**Figure S5.** Comparison of water contact angles on microarrays with different morphologies: a) L-AR( $133^{\circ} \pm 1^{\circ}$ ) b) H-AR( $140^{\circ} \pm 1^{\circ}$ ) c) RM( $150^{\circ} \pm 1^{\circ}$ ) d) GFMI: $155^{\circ} \pm 1^{\circ}$  ) and e) GFMI (  $153^{\circ} \pm 1^{\circ}$  ).