

Supplementary information:

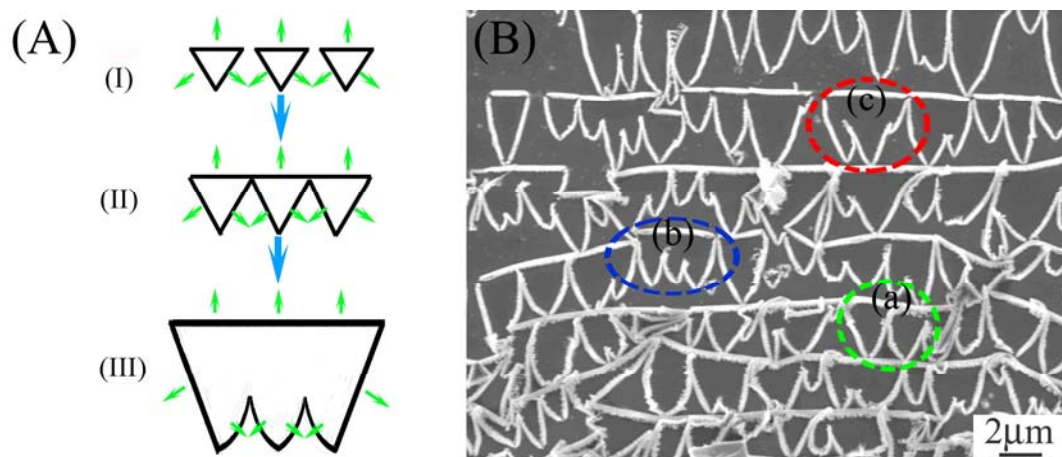


Figure S1. After initial formation, the small triangular micropatterns (etching units) begin to expand mainly horizontally, as schematically illustrated in Figure S1A, leading to the formation of the irregular arrangement of triangular micropatterns. Figure S1B shows the corresponding irregular combination of the etching units, [(a) corresponds to (II), (b, c) correspond to (III)] which is similar to that shown in Figure 1a.

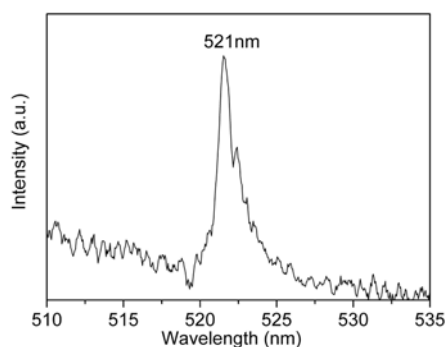


Figure S2 Photoluminescence spectrum of Si-based Zn_2SiO_4 nanowires from a He-Cd laser system with the excited wavelength of 325nm.