

Supplemental Document

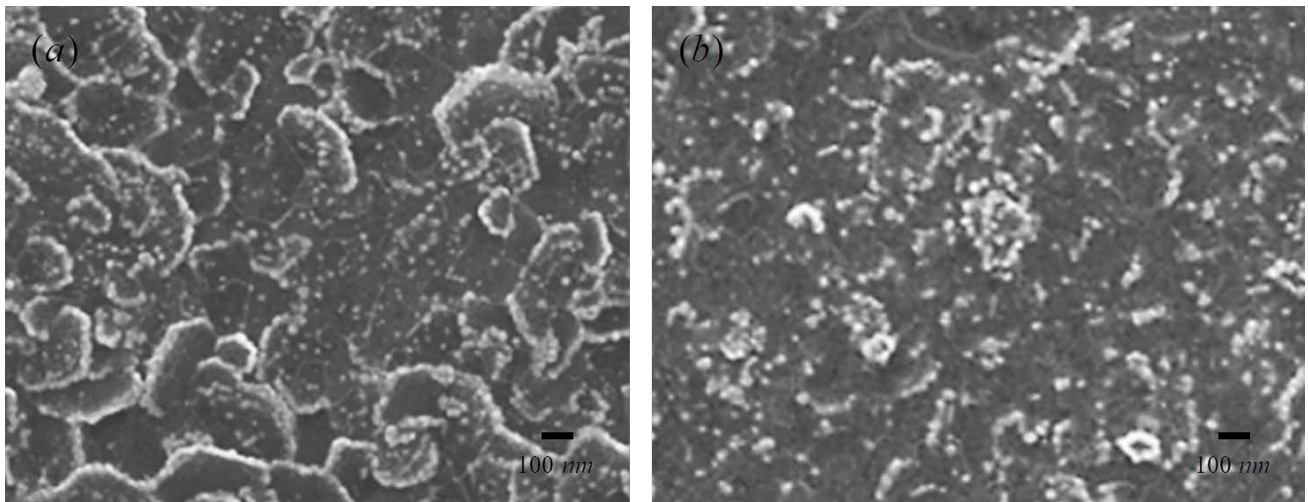


Figure S1. The morphology of  $\text{GaS}_x$  growth from the silicon substrate at (a) 2 cm, and (b) 3 cm, downstream of the Ga source. The figures show that the dots appear in white triggers the nucleation and participated in the lateral growth of  $\text{GaS}_x$  platelets.