

Supplementary Information

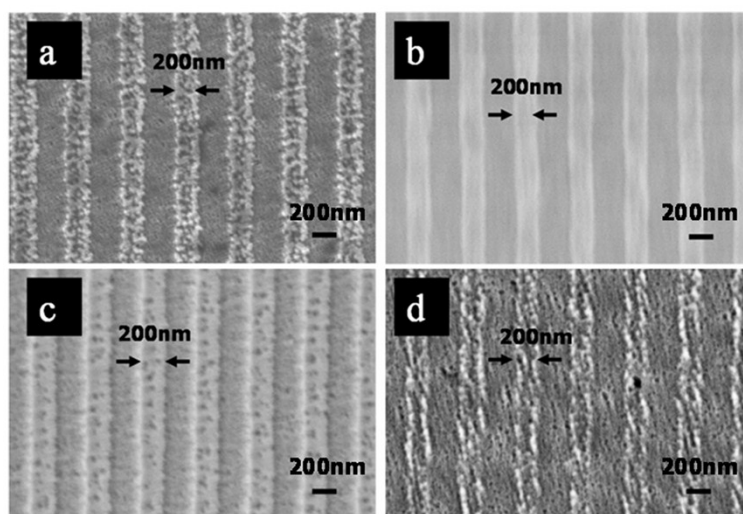


Fig.1 Cr gratings fabricated by chemical etching for different time: a) 60s; b) 120s; c) 180s; d) 240s.

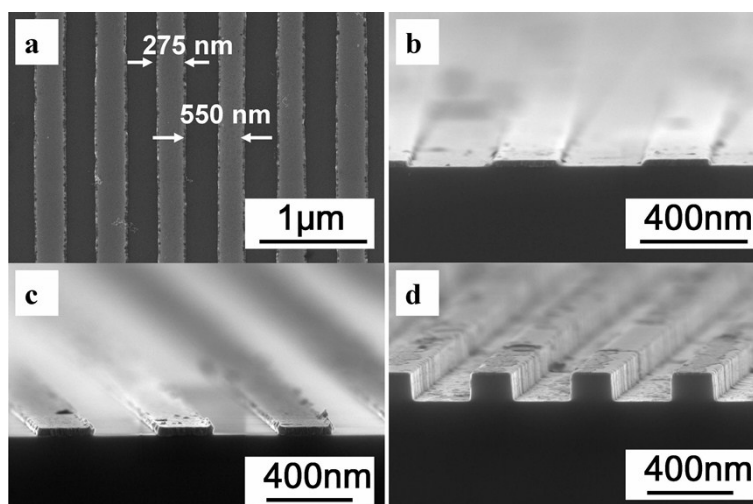


Fig. 2. a)-b) are top view and cross section SEM images of 550nm pitch Cr grating with a groove depth of 70nm made by an optimized procedure; c) is an SEM image of Cr grating made by the lift-off process; d) Si grating fabricated via RIE with a groove depth of 280 nm using the Cr grating in Figure 2b as the RIE mask.