

Supporting Information

Synthesis of textured discontinuous-nanoisland $\text{Ca}_3\text{Co}_4\text{O}_9$ thin films

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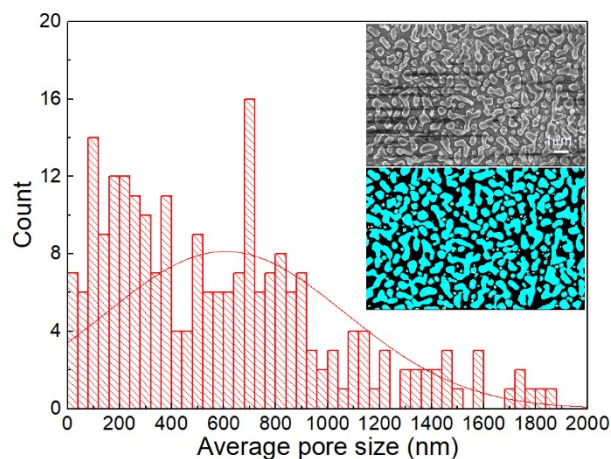


Figure S1 Nanoisland size distribution of discontinuous films with islands of highly textured $\text{Ca}_3\text{Co}_4\text{O}_9$. The inset images are the SEM image of the film grown on mica with the Ca/Co ratio (1:0.52) and image treated by ImageJ from the SEM image.

The shape of nano islands is irregular, but most of the nano islands are close hexagonal in shape. The average nano island sizes are estimated from the nanopore area with an uncertainty of 30%, by assuming all the pores to be regular hexagons. The nano islands area is calculated from analyses of SEM images by ImageJ software. The average nano island size is equal to $L + 2L\cos 60^\circ$ where L is hexagon side length.