Supplemental Information for:

Nanoporous Gyroid Metal Oxides with Controlled Thickness and Composition by Atomic Layer

Deposition from Block Copolymer Templates

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Fig. S1

Cross-sectional view of FESEM micrograph of the nanoporous gyroid-forming bulk-film template.



Deposition of ZnO by ALD into the gyroid templates with 3 seconds exposure time.



TEM micrographs of PS/ZnO gyroid nanohybrids without staining from templated ALD with: (a) 40 ALD cycles; (b) 80 ALD cycles.



Measured and fitted X-ray reflectivity profiles of the PS/ZnO gyroid nanohybrids fabricated from templated ALD with different cycle numbers.



Cross-sectional view of the SEM micrograph of Al_2O_3 @ZnO core-shell structure. The insets show the enlarged images of the locations from the top to the bottom. The average film thickness is approximately 5 μ m.