## Supplementary information: Physical and Electrical Characterization of ALD Chalcogenide Materials for 3D Memory Applications

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Figure S1. Scanning electron micrograph (a), and EDS line scan of elemental distribution (b) of an ALD GeTe<sub>6</sub> film grown on a PillarHall® LHAR3 test structure. EDS reveals that Te:Ge ratio drops significantly from the planar opening area between trenches (region 1) to the area inside the trench (region 2), while significant quantities of germanium accumulate beyond an aspect ratio of 94:1 (region 3).



Figure S2. Optical micrograph (a) and optical profile of deflection (b) of an ALD GeSe film deposited onto a PillarHall® LHAR4 silicon micromembrane (membrane thickness  $1.5 \mu m$ ).