

Interfaces and Composition Profiles in Metal-Sulfide Nanolayers Synthesized by Atomic Layer Deposition

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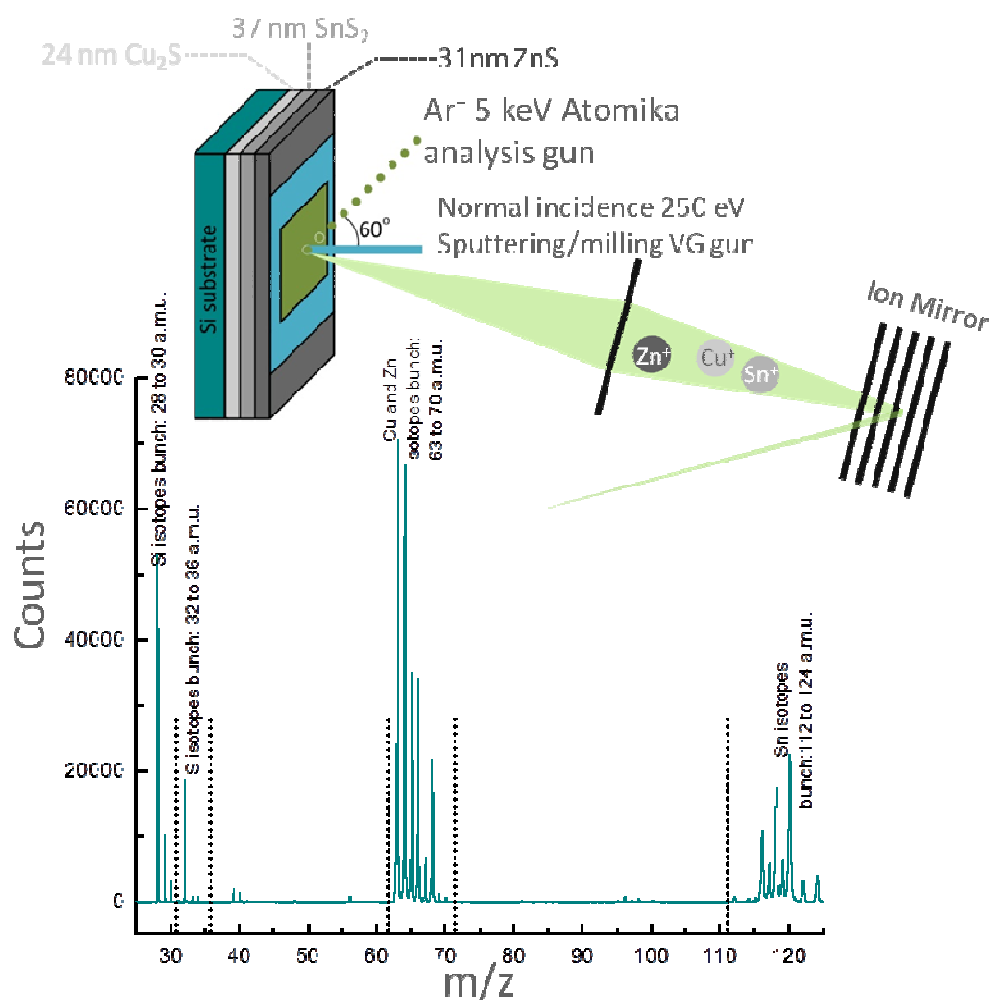


Figure S1. Schematic of the *gentleDB* TOF SIMS measurement (top) and sample mass spectrum (bottom).

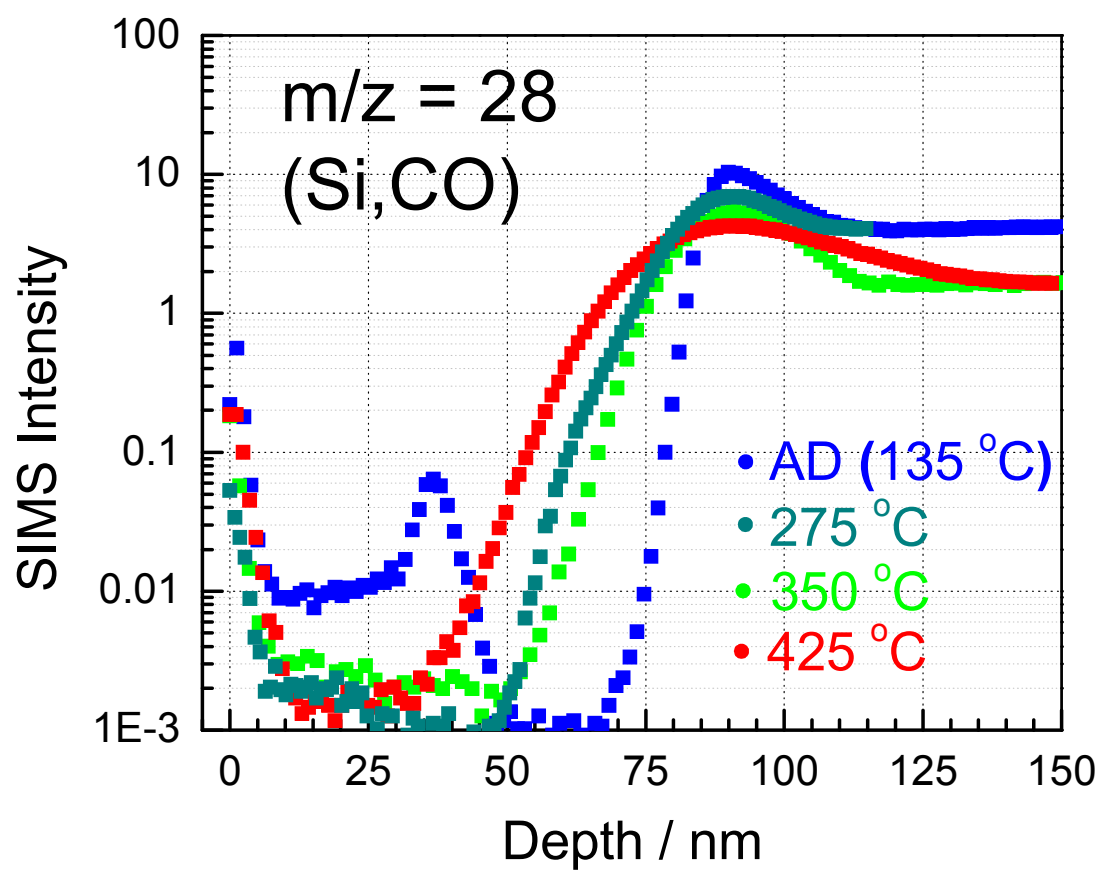


Figure S2. Depth profile of the $m/z=+28$ peak which can be attributed to either Si or CO depending on the isotopic ratios. The peak in the AD profile at depths less than 50 nm did not have the isotopic ratio of Si and is therefore attributed to CO. The spike near depth=0 is also attributed to CO from atmospheric contaminants.

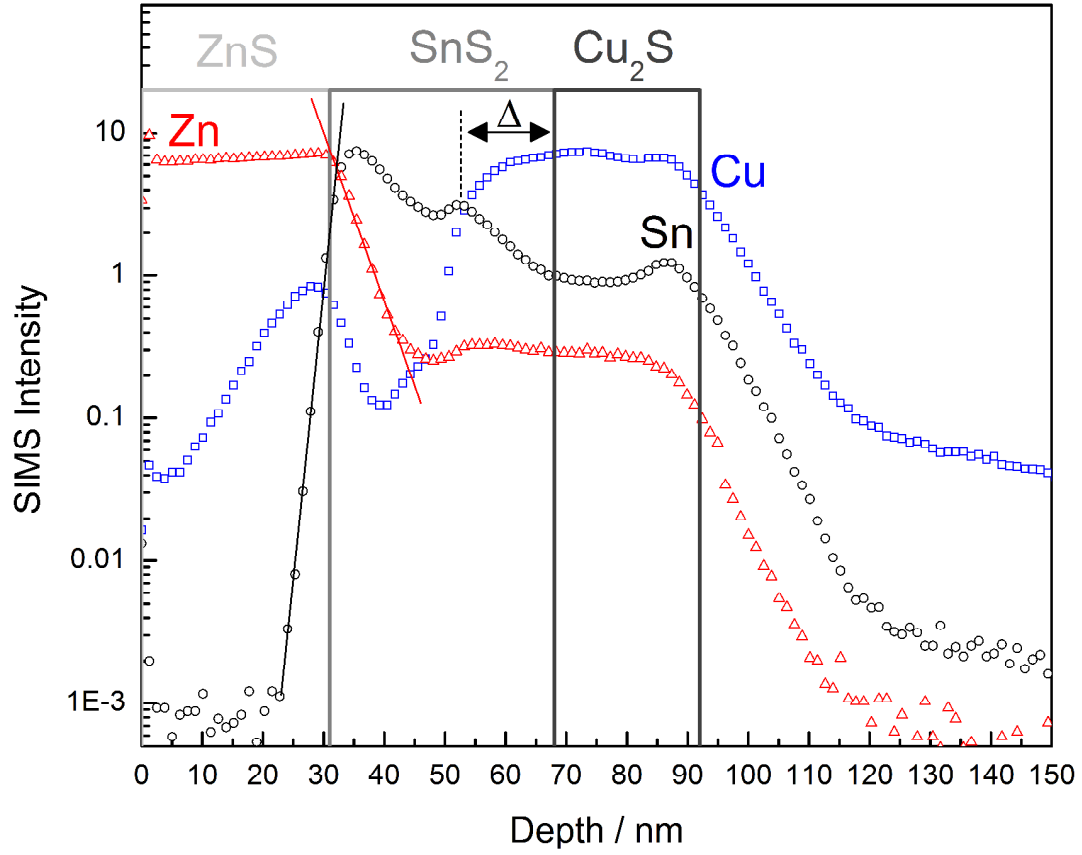


Figure S3. SIMS profile of the as-deposited multilayer and summary of the analysis used to determine the various values of L_D described in the main text. The solid red and black lines are exponential decays: $\frac{I}{I_0} = e^{-(L_D^{-1} * d)}$ where d is the depth into the matrix, I is the intensity of the mobile species and I_0 is the intensity of the mobile species at the interface. Δ is the amount by which the $\text{SnS}_2/\text{Cu}_2\text{S}$ interface moved.