



Figure 1: 3D volume and surface reconstructions using SE images acquired with GaBiLi and AuGeSi ion sources. a) 3D volume reconstruction of a microchip. 35 keV Li^+ primary ions were used for high-resolution SE imaging (70 images in total) while 35 keV Bi^+ ions served as ionic species for efficient sputtering of the surface layer-by-layer. In this reconstruction, a cuboid was cut out to visualize the interior structure of the microchip. b) Side view on a 3D SE surface reconstruction of a $\text{Bi}_2\text{Ca}_2\text{Co}$ grain. A photogrammetric approach was used to reconstruct its surface using 48 SE images acquired around the ROI using a 70 keV Si^{2+} primary ion beam.