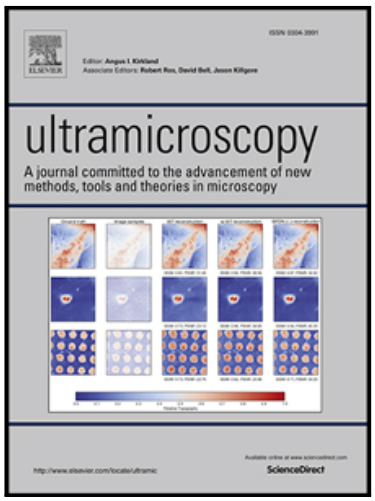

Atom Probe Tomography Analysis of SiGe Fins Embedded in SiO_2: Facts and Artefacts

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Highlights

- Compressed lateral dimension and oxygen penetration into the fin body are apparent.
- Causes are converging and overlapping ion trajectories due to a unique tip shape.
- A density correction algorithm rectifies the dimensional artefact.
- The Si concentration in the SiGe fin is locally overestimated by 1-2 at%.
- The artefacts depend on the ratio of the oxide/Si width in the emitter.