

## **Strain analysis of a Ge micro disk using precession electron diffraction**

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## **SUPPLEMENTARY MATERIALS**

Figure S1 shows representative diffraction patterns from different parts of the microdisk. The rotation of the pattern between the outer part of the wing and the inner part of the post is clear. The distortions of the patterns due to small strains of the order of 1-2% is harder to discern by eye, although the larger difference between the Si diffraction pattern and the Ge patterns is more recognisable.

Figure S2 shows two dark field images of Ge layers grown on Si prior to fabrication of a microdisk. Such images were used in the calculation of the starting dislocation density in the Ge.

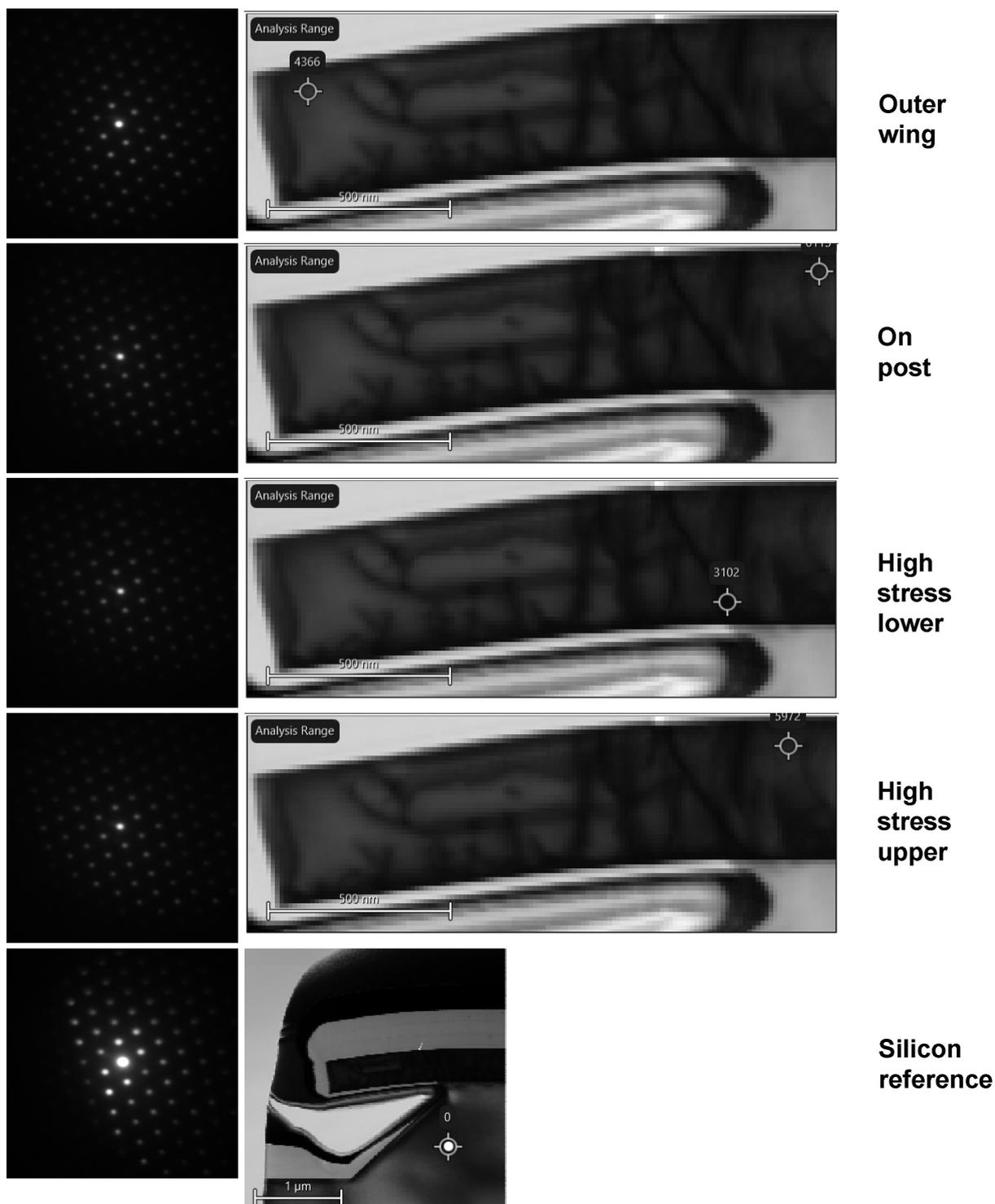


Figure S1: Representative diffraction patterns from different areas of the left wing of the Ge microdisk, together with the silicon reference from the post well away from the interface to the Ge. A small gamma correction has been applied to all diffraction patterns to brighten the diffraction spots with regard to the primary beam, in order to make it easier for the reader to see them.

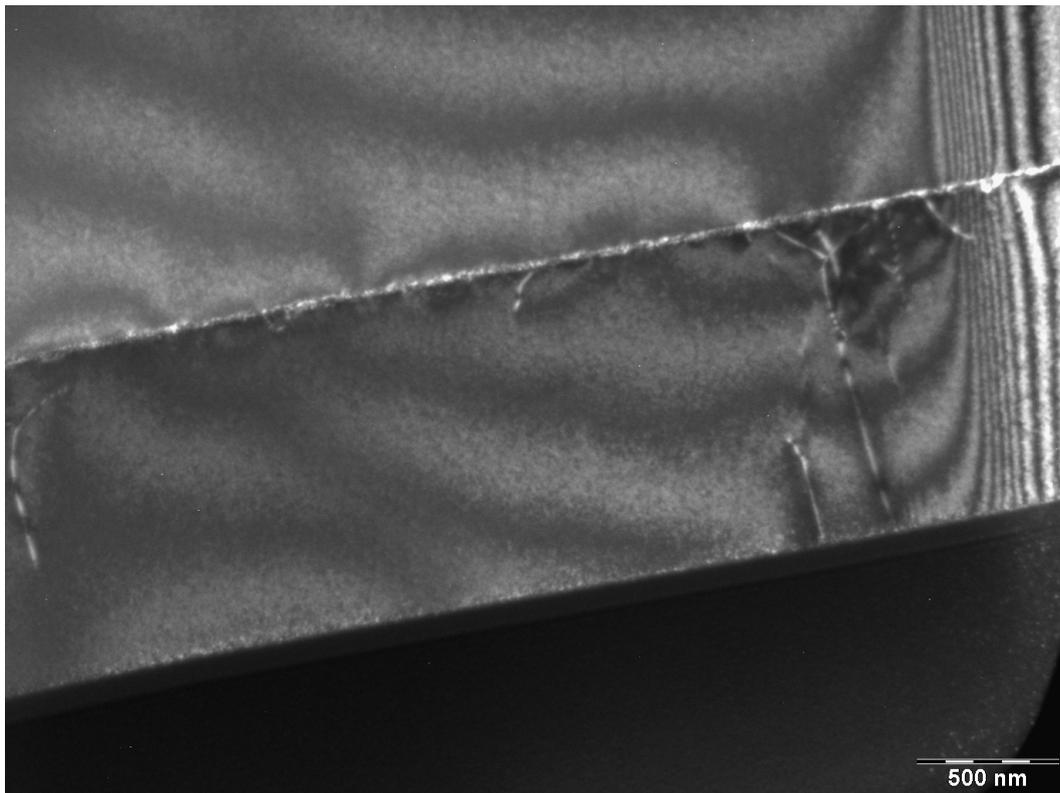
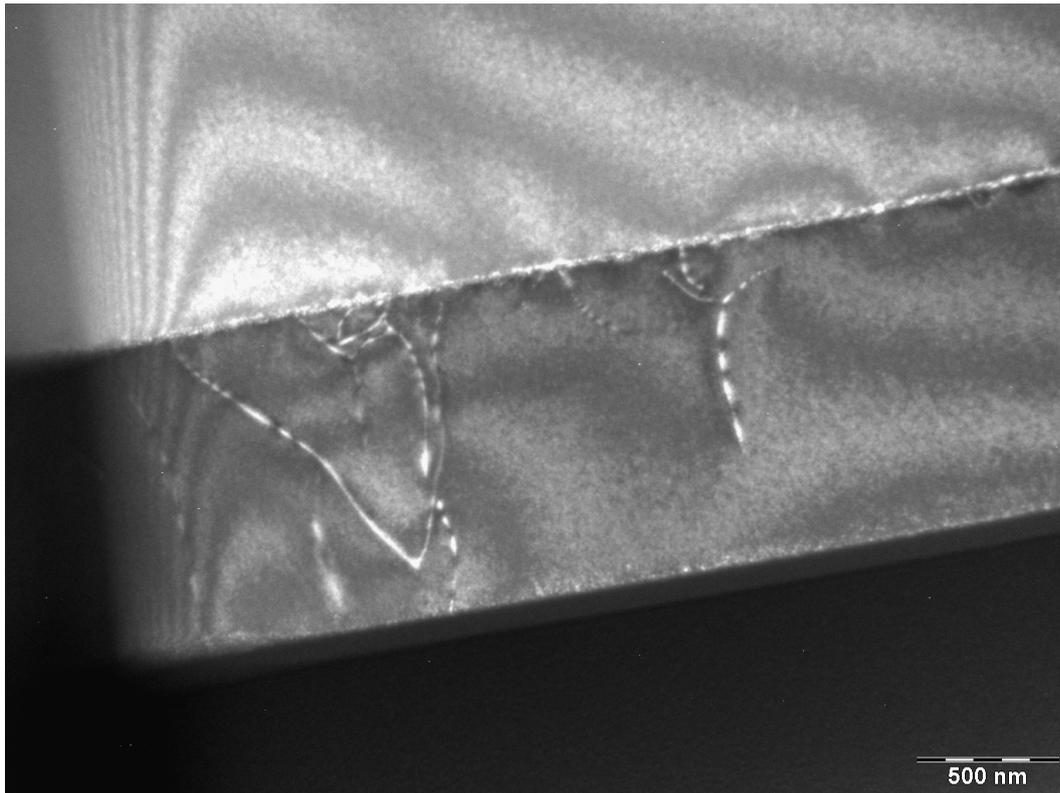


Figure S2: Two dark field images of Ge layers (lower) grown on a Si substrate (upper) used in the estimation of the threading dislocation density prior to the fabrication of the microdisks.