

## **APPENDIX. EBSD acquisition and indexing parameters**

### JEOL 5900LV Scanning Electron Microscope Operating Conditions

Acceleration voltage:	15 keV
Stage position:	Y=20-25, Z=28, Tilt=69.99
Working distance:	13-16 mm
Spot Size:	70

### Flamenco Acquisition Parameters and Background Correction<sup>1</sup>

Binning:	4x4
Gain:	High
Background number of frames:	64
Timing per frame:	120-180
Noise reduction number of frames:	9-14

### Flamenco Band Detection and Indexing Conditions<sup>1</sup>

Number of bands:	6-7
Band Edges or Centers:	sometimes edges, sometimes centers
Hough resolution:	50-65
Maximum MAD value:	1.1

<sup>1</sup> Acquisition and Indexing parameters were determined by trial and error to optimize pattern quality and acquisition time in mapping mode.