Accepted Manuscript

Comparison of Dislocation Characterization by Electron Channeling Contrast Imaging and Cross-Correlation Electron Backscattered Diffraction

Bret E. Dunlap, Timothy J. Ruggles, David T. Fullwood, Brian Jackson, Martin A. Crimp

 PII:
 S0304-3991(17)30317-0

 DOI:
 10.1016/j.ultramic.2017.08.017

 Reference:
 ULTRAM 12448



To appear in: *Ultramicroscopy*

Received date:23 June 2017Revised date:22 August 2017Accepted date:29 August 2017

Please cite this article as: Bret E. Dunlap, Timothy J. Ruggles, David T. Fullwood, Brian Jackson, Martin A. Crimp, Comparison of Dislocation Characterization by Electron Channeling Contrast Imaging and Cross-Correlation Electron Backscattered Diffraction, *Ultramicroscopy* (2017), doi: 10.1016/j.ultramic.2017.08.017

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- Locations of ECCI imaged dislocations generally match CC-EBSD GND distributions.
- ECCI derived dislocation densities replicate CC-EBSD GND densities.
- Good agreement with dislocation characterization by the two techniques.
- ECCI is optimal for low dislocation density.
- CC-EBSD is better for high dislocation density.

Download English Version:

https://daneshyari.com/en/article/5466628

Download Persian Version:

https://daneshyari.com/article/5466628

Daneshyari.com