Accepted Manuscript

Modeling microstructure evolution in magnesium: comparison of detailed and reduced-order kinematic models

Yingrui Chang, Jeffrey T. Lloyd, Richard Becker, Dennis M. Kochmann

PII: S0167-6636(16)30380-5

DOI: 10.1016/j.mechmat.2017.02.007

Reference: MECMAT 2702

To appear in: Mechanics of Materials

Received date: 7 October 2016
Revised date: 1 February 2017
Accepted date: 24 February 2017



Please cite this article as: Yingrui Chang, Jeffrey T. Lloyd, Richard Becker, Dennis M. Kochmann, Modeling microstructure evolution in magnesium: comparison of detailed and reduced-order kinematic models, *Mechanics of Materials* (2017), doi: 10.1016/j.mechmat.2017.02.007

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

- A comparison is made between two computational models of magnesium polycrystals
- Texture evolution, hardening behavior, and mechanical anisotropy are contrasted
- Models that track reorientation are more accurate, but introduce computational burden



Download English Version:

https://daneshyari.com/en/article/5018462

Download Persian Version:

https://daneshyari.com/article/5018462

<u>Daneshyari.com</u>