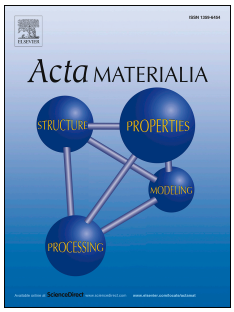
Accepted Manuscript



Evolution of dislocation density in bainitic steel: Modeling and experiments

S.H. He, B.B. He, K.Y. Zhu, M.X. Huang

PII: S1359-6454(18)30124-1

DOI: 10.1016/j.actamat.2018.02.023

Reference: AM 14379

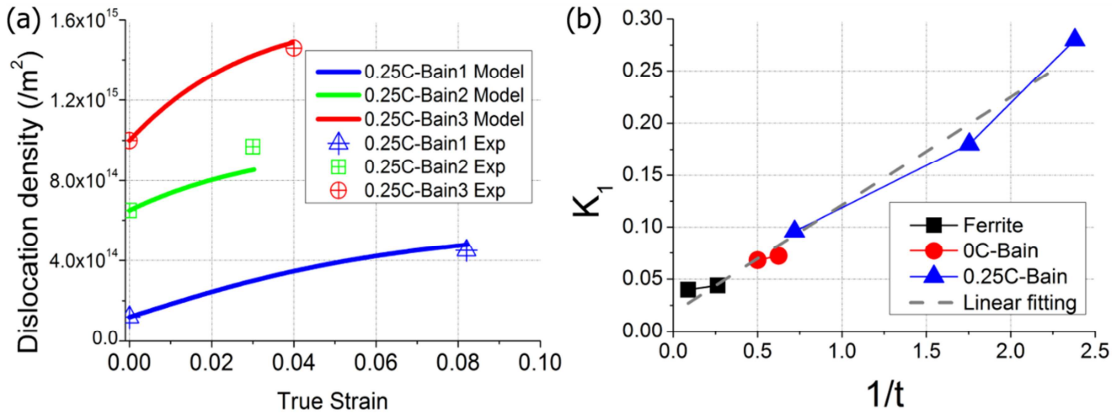
To appear in: *Acta Materialia*

Received Date: 23 December 2017

Revised Date: 8 February 2018

Accepted Date: 9 February 2018

Please cite this article as: S.H. He, B.B. He, K.Y. Zhu, M.X. Huang, Evolution of dislocation density in bainitic steel: Modeling and experiments, *Acta Materialia* (2018), doi: 10.1016/j.actamat.2018.02.023.



(a) Modeling and experiment results of the dislocation density evolution for the 0.25C bainitic steels. (b) The overall dislocation multiplication factor against the reciprocal of lath thickness or grain size among bainitic and ferritic steels.