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''GRAIN BOUNDARY AND DISLOCATION MEDIATED DEFORMATION MECHANISMS IN NANOCRYSTALLINE METALS''

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Abstract:

Nano-crystalline metals performance of defects and mechanisms of plastic deformation and conventional polycrystalline are completely divergent in behavior and its performance.

This paper discusses about grain boundary and dislocation mediated deformation mechanisms in Nano-crystalline metals. The plots are for burger vectors of single value, Gaussian and uniform characteristics considering various parameters such as elastic constants, plasticity, loading condition and uncertainty quantification.

KEYWORDS

Grain boundary, Nano-crystalline metals, deformation, Burger vectors

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