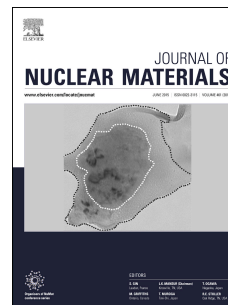


# Accepted Manuscript

The effect of thermomechanical processing on second phase particle redistribution in U-10□wt%Mo

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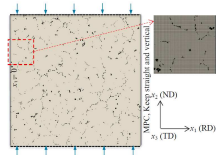
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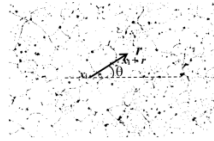
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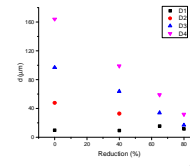
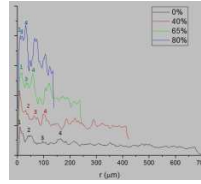


Microstructure-based Plane Strain Compression FE Model

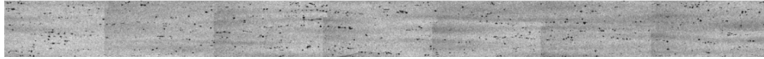
$$S_2^{(p)}(\mathbf{r}) = \sum_{i=1}^N I^{(p)}(\mathbf{x}_i) I^{(p)}(\mathbf{x}_i + \mathbf{r})$$



Two Point Correlation Functions (2PCF) Calculations of Particles



Vertical 2PCF of Particles ( $\theta=90^\circ$ ) and Major Peak Position Changes with Reductions



Experimental



Simulated

Similarity between Simulated and Experimental Microstructures after 80% Reduction

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