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BD nucleation as a critical transition in dislocation population

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It has been suggested that BD nucleation is a possible outcome of a stochastic process where the dislocation population is undergoing a critical transition leading to critical protrusion formation. In the past few years we have used a combination of post mortem microscopy work as well as acoustic emission studies and field emission studies in order to try and track the dislocation population activity and its correlation with BD nucleation. I will review the findings of this study up to now, describe hurdles and future plans.

Type of contribution

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session

Experiments and Diagnostics

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