

Dynamics of Perturbations and Shear Band Instabilities

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The dynamic Green's function is obtained for an infinite nonlinear-elastic, incompressible solid homogeneously deformed and subject to time-harmonic incremental perturbations. The formulation is employed to investigate the effects of perturbations on the dynamic behaviour of solids near the shear band formation threshold. Results shed light on the problem of interaction between dynamics and shear band formation.

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