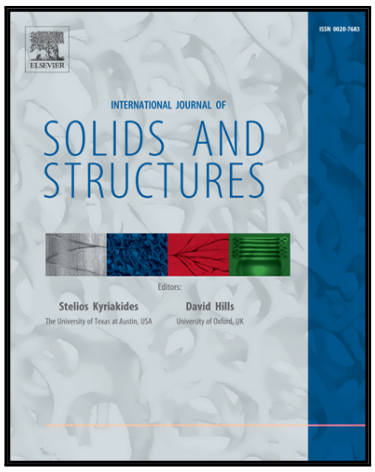

On the Application of a Lattice Method to Configurational and Fracture Mechanics

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Highlights

- Lattice method capabilities in obtaining LEFM fracture mechanics quantities
- Correlating the lattice with the concepts of material force and crack band width
- Obtaining crack tip driving & material forces by two independent distinct methods
- Satisfying local balance law in homogeneous bodies with no need for mesh update
- Characterizing crack tip material force explicitly by three material parameters