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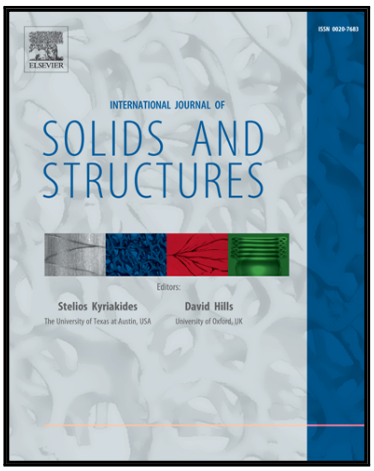

On crack propagation in brittle material using the Distinct Lattice Spring Model

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PII: S0020-7683(17)30175-0
DOI: 10.1016/j.ijsolstr.2017.04.024
Reference: SAS 9547

To appear in: *International Journal of Solids and Structures*

Received date: 13 June 2016
Revised date: 16 April 2017
Accepted date: 18 April 2017

Please cite this article as: Chao Jiang , Gao-Feng Zhao , Nasser Khalili , On crack propagation in brittle material using the Distinct Lattice Spring Model, *International Journal of Solids and Structures* (2017), doi: 10.1016/j.ijsolstr.2017.04.024

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Highlights

- The fracture criterion in DLSM has been validated against LEFM.
- Fracture toughness is influenced by the intrinsic length-scale of microstructure.
- A simple and unified crack criterion can simulate various fracturing conditions.
- DLSM can simulate crack propagation and coalescence with pre-existing cracks.
- DLSM can easily cope with dynamic crack propagation and 3D fracturing.

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