

Accepted Manuscript

Simulating quasi-brittle failures including damage-induced softening
based on the mechanism of stress redistribution

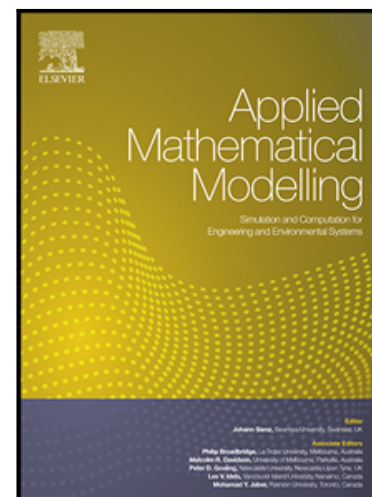
Jinxing Liu

PII: S0307-904X(17)30705-9
DOI: [10.1016/j.apm.2017.11.014](https://doi.org/10.1016/j.apm.2017.11.014)
Reference: APM 12056

To appear in: *Applied Mathematical Modelling*

Received date: 16 March 2017
Revised date: 15 November 2017
Accepted date: 22 November 2017

Please cite this article as: Jinxing Liu , Simulating quasi-brittle failures including damage-induced softening based on the mechanism of stress redistribution, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.11.014](https://doi.org/10.1016/j.apm.2017.11.014)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Explaining damage-induced stress redistribution based on the principle of superposition;
 - Discretizing a softening material element into a series of ideally brittle sub-elements;
 - Proposing a robust model for simulating quasi-brittle softening failures;
 - Verifying the model's effectiveness by studying failures in blocky media.
-

Download English Version:

<https://daneshyari.com/en/article/8052077>

Download Persian Version:

<https://daneshyari.com/article/8052077>

[Daneshyari.com](https://daneshyari.com)