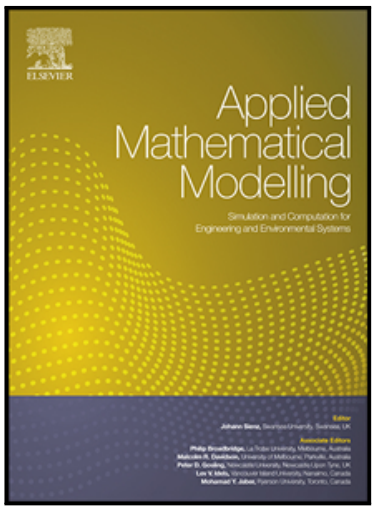
Accepted Manuscript



Effective elastic properties for layered composites considering non-uniform imperfect adhesion

Humberto Brito-Santana , Ricardo de Medeiros ,
Antonio Joaquim Mendes Ferreira , Reinaldo Rodriguez-Ramos ,
Volnei Tita

PII: S0307-904X(18)30021-0
DOI: 10.1016/j.apm.2018.01.009
Reference: APM 12125

To appear in: *Applied Mathematical Modelling*

Received date: 19 May 2017
Revised date: 4 January 2018
Accepted date: 10 January 2018

Please cite this article as: Humberto Brito-Santana , Ricardo de Medeiros , Antonio Joaquim Mendes Ferreira , Reinaldo Rodriguez-Ramos , Volnei Tita , Effective elastic properties for layered composites considering non-uniform imperfect adhesion, *Applied Mathematical Modelling* (2018), doi: 10.1016/j.apm.2018.01.009

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.

ACCEPTED MANUSCRIPT

Highlights

- Analytical expressions for the elastic interlayer properties are derived for layered composites.
- Two-layers model with non-uniform imperfect adhesion is considered.
- The three-layers model provides excellent approximation to the two-layers model.
- The effective properties are calculated using numerical and analytical models for layered composites.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/8051567

Download Persian Version:

https://daneshyari.com/article/8051567

Daneshyari.com