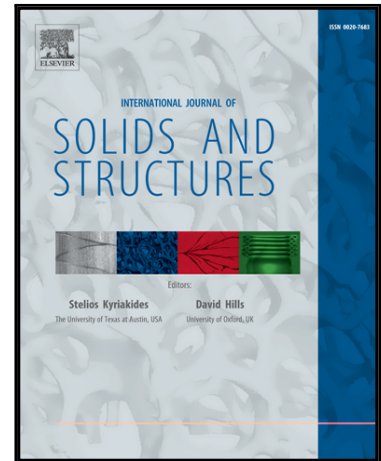


Accepted Manuscript

Experimental and theoretical studies on inter-fiber failure of unidirectional polymer-matrix composites under different strain rates

Yong Tao , Haosen Chen , Kai Yao , Hongshuai Lei ,
Yongmao Pei , Daining Fang

PII: S0020-7683(16)30339-0
DOI: [10.1016/j.ijsolstr.2016.11.014](https://doi.org/10.1016/j.ijsolstr.2016.11.014)
Reference: SAS 9367



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

Received date: 25 June 2016
Revised date: 28 September 2016
Accepted date: 14 November 2016

Please cite this article as: Yong Tao , Haosen Chen , Kai Yao , Hongshuai Lei , Yongmao Pei , Daining Fang , Experimental and theoretical studies on inter-fiber failure of unidirectional polymer-matrix composites under different strain rates, *International Journal of Solids and Structures* (2016), doi: [10.1016/j.ijsolstr.2016.11.014](https://doi.org/10.1016/j.ijsolstr.2016.11.014)

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

- Quasi-static and dynamic tests on unidirectional glass/epoxy specimens with various off-axis angles are carried out.
- Overall test data for inter-fiber failure of unidirectional glass/epoxy composite under different strain rates is presented.
- A new strain rate dependent inter-fiber failure theory is developed.
- Comparison shows that the present theory is accurate in evaluating the inter-fiber failure of unidirectional polymer-matrix composites.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/4922469>

Download Persian Version:

<https://daneshyari.com/article/4922469>

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